



# USAID Child Survival and Disease Programs Fund Progress Report

**Fiscal Year 2000**



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## Acronyms

<b>AIDS</b>	Acquired immunodeficiency virus syndrome
<b>AIN</b>	<i>Atencion Integral a la Ninez</i>
<b>AMR</b>	Antimicrobial resistance
<b>ANE</b>	Asia/Near East
<b>ARI</b>	Acute respiratory infection
<b>BHR</b>	Bureau for Humanitarian Response (USAID)
<b>BSS</b>	Behavior Surveillance Survey
<b>CDC</b>	Centers for Disease Control and Prevention
<b>CDD</b>	Control of diarrheal diseases
<b>CHW</b>	Community health worker
<b>CSD</b>	Child survival and diseases
<b>CSGP</b>	Child Survival Grants Program
<b>DALY</b>	Disability-adjusted life-year
<b>DCOF</b>	Displaced Children and Orphans Fund
<b>DHS</b>	Demographic and Health Survey
<b>DOTS</b>	Directly Observed Treatment Short Course (TB)
<b>DPT</b>	Diphtheria, pertussis, and tetanus
<b>E&amp;E</b>	Europe and Eurasia
<b>EFA</b>	Education for All
<b>ESF</b>	Economic Support Fund
<b>FSA</b>	Freedom Support Act
<b>FSW</b>	Female sex worker
<b>FY</b>	Fiscal year
<b>GAVI</b>	Global Alliance for Vaccines and Immunization
<b>GER</b>	Gross enrollment ratio
<b>Hib</b>	<i>Haemophilus influenzae</i> type b
<b>HIV</b>	Human immunodeficiency virus
<b>IDS</b>	Integrated disease surveillance
<b>IMCI</b>	Integrated Management of Childhood Illness
<b>IPAA</b>	International Partnership Against AIDS in Africa
<b>ITN</b>	Insecticide-treated netting
<b>LAC</b>	Latin America/Caribbean
<b>LIFE</b>	Leadership and Investment in Fighting an Epidemic
<b>M/B</b>	Management Bureau/Budget Office (USAID)
<b>M/B</b>	Management Bureau/Budget Office (USAID)
<b>MDR</b>	Multidrug-resistant
<b>MTCT</b>	Mother-to-child transmission
<b>NGO</b>	Nongovernmental organization
<b>NHA</b>	National health account
<b>NID</b>	National Immunization Day
<b>ORS</b>	Oral rehydration salts
<b>ORT</b>	Oral rehydration therapy
<b>PAHO</b>	Pan American Health Organization

<b>PEI</b>	Polio Eradication Initiative
<b>PHCP</b>	Primary health care practice
<b>PVO</b>	Private voluntary organization
<b>RBM</b>	Roll Back Malaria
<b>SEED</b>	Support for East European Democracy
<b>STD</b>	Sexually transmitted disease
<b>STI</b>	Sexually transmitted infection
<b>TB</b>	Tuberculosis
<b>TEPHINET</b>	Training Programs in Epidemiology for Public Health Interventions Network
<b>UNAIDS</b>	United Nations Joint Programme on HIV/AIDS
<b>UNDP</b>	United Nations Development Programme
<b>UNICEF</b>	United Nations Children Fund
<b>VCT</b>	Voluntary counseling and testing
<b>VOA</b>	Voice of America
<b>WHO</b>	World Health Organization

## **Executive Summary**

USAID is committed to improving the health and well-being of children and helping to safeguard the world against HIV/AIDS and other infectious diseases. Since 1985, when the U. S. Congress created the Child Survival Program, USAID has obligated more than \$4 billion in support of initiatives in child survival, infectious diseases, and basic education. This support has contributed to major reductions in infant and under-five mortality rates.

With the support of Congress, the program has grown and evolved over time:

- In 1986, USAID began supporting HIV/AIDS prevention programs in response to the rapid spread of this disease.
- In 1997, Congress created the Child Survival and Disease (CSD) Programs Fund, which integrated into a single account the Agency's programs in support of child survival, HIV/AIDS, maternal health, and basic education.
- In 1998, Congress provided additional funding for an infectious disease initiative.
- In 2000, Congress provided USAID with significantly increased resources to combat HIV/AIDS and for the Infectious Disease Initiative.

Today, the CSD account helps USAID support a global program of child survival, disease control, and basic education. This program not only reduces mortality and disability in children but also promotes the establishment of viable, sustainable health systems that will help meet the future needs of developing countries.

USAID's child survival and disease program contributes to five major goals:

- Improving infant and child health and nutrition and reducing infant and child mortality
- Reducing deaths, nutrition insecurity, and other adverse outcomes to women as a result of pregnancy and childbirth
- Reducing HIV/AIDS transmission and mitigating the impact of the HIV/AIDS pandemic in developing countries
- Reducing the threat of infectious diseases of major public health importance
- Promoting full primary education

In addition to the activities funded by the CSD account, this report describes child survival and disease activities funded by other USAID accounts, including the Economic Support Fund (ESF), the Freedom Support Act (FSA), and the Support for East European Democracy (SEED) Act.

## Program Allocations

In 2000, USAID's CSD account allocations were made in the following categories:

- **Child Survival and Maternal Health.** \$268.2 million supported programs in immunization, nutrition, and maternal health; initiatives to build and strengthen health care systems and capacity; and other child survival-related activities. Of this total, \$25 million supported the global Polio Eradication Initiative (PEI); \$12 million supported activities for displaced children and orphans; and \$25 million supported the micronutrients program. Approximately \$50 million of these funds were used to improve maternal health and survival.
- **HIV/AIDS.** \$175 million supported the prevention and control of HIV/AIDS and mitigating its impact in developing countries. Over half of these resources are focused on Africa, where the HIV/AIDS epidemic is most severe. USAID is also a major supporter of the Joint United Nations Programme on HIV/AIDS (UNAIDS).
- **Infectious Disease Initiative.** \$73.6 million supported USAID's initiative to reduce the threat of infectious diseases (especially malaria and tuberculosis), reduce the spread of antimicrobial resistance, and improve disease surveillance and response.
- **Basic Education.** \$98 million supported USAID's basic education program. USAID focuses on policy reform, institutional development, improved educational practices, and community participation to reduce educational disparities in targeted countries.

In addition to funding from the CSD account, over \$100 million from the Economic Support Fund, the Freedom Support Act, and SEED Act funds supported child survival and disease control programs in selected countries, including some of the former Soviet and Eastern European states. A substantial amount of the Agency's Food for Peace resources also benefited children and their mothers.

## Progress and Highlights

Since 1985, USAID's child survival, disease control, and basic education programs, in coordination with those of other donors, have led to steadily declining infant and under-five mortality rates in developing countries. The Agency has made great strides in implementing programs in support of lifesaving interventions such as immunizations, oral rehydration therapy for diarrheal diseases, and breastfeeding, although substantial unmet needs remain for these and other proven cost-effective interventions. USAID has also made progress in HIV/AIDS prevention, especially in education and condom promotion, and in establishing programs to address the threat of infectious diseases. In addition, USAID support for basic education has increased enrollment rates and reduced educational gender gaps in targeted countries.

Some highlights of USAID's achievements in child survival, disease control, and basic education follow:

- **Immunizations.** Since its inception in 1999, the Global Alliance for Vaccines and Immunization (GAVI) – a creation of the World Health Organization, the United Nations Children's Fund, the Gates Foundation, USAID, private-sector supporters, and others – has committed close to \$200 million from various donors to purchase under-utilized vaccines and support immunization systems in 24 countries. Through its Boost Immunization Initiative, USAID increased its allocations for immunization programs in FY 2000 by approximately \$9 million to a total of about \$34 million, reversing years of flat or declining funding for this key intervention. As a result, USAID missions in 14 countries have designed new immunization programs or enhanced existing ones.
- **Polio.** Although polio transmission was not interrupted by the original target date of December 2000 in all regions, significant progress has been achieved. As of January 2001, the number of polio cases reported for 2000 was about 2,400, compared with 7,000 cases in 1999 and an estimated 350,000 cases annually in the 1980s. Substantial transmission remains in only about 20 countries. In October 2000, the Western Pacific Region (including China) was certified polio-free, seven years after this goal was attained in the Americas.
- **Vitamin A.** In 2000, USAID helped seven countries conduct semiannual vitamin A capsule distributions for the first time, increasing the number of countries carrying out these distributions to 13 from six in 1999. In addition, USAID helped more than 15 countries add vitamin A supplementation to National Immunization Days (NIDs) conducted to eradicate polio.
- **Breastfeeding.** USAID supports breastfeeding promotion in all regions. Through support for advocacy, policy change, communications, and behavior change interventions, USAID programs in Madagascar, Ghana, and India achieved substantial changes in breastfeeding behaviors among target populations in 2000. Overall, Demographic and Health Surveys have shown multifold increases in exclusive breastfeeding in many USAID-assisted countries.
- **Controlling Diarrheal Diseases.** A multicenter trial funded by USAID and other donors evaluated the efficacy and safety of a new formulation of oral rehydration salts (ORS) to prevent life-threatening dehydration from diarrhea. Researchers found that using ORS solution with reduced osmolarity (salt content) was associated with a 40 percent reduction in the need for costly intravenous infusions. Based on these findings, WHO is considering a change in its recommendation for the formulation of ORS for children.
- **Integrated Management of Childhood Illness (IMCI).** USAID was a major supporter of the clinical and applied research that led to the development of the IMCI approach, which integrates the key child survival interventions addressing diarrheal diseases, acute respiratory infections, malaria, breastfeeding, nutrition, and immunizations. After four years, the strategy has been implemented in 74

countries, with about one-third receiving USAID support. In 2000, with substantial USAID input, an interagency working group defined how IMCI could be applied to promote child health at the household and community levels. The group also developed a structured approach to introducing this household/community component in 10 countries.

- **Maternal Health.** USAID supports a core set of cost-effective maternal health interventions around the world. In 2000, the Agency supported a wide range of programs to improve or expand maternal and newborn care services in about 30 countries. The objectives of these programs included reducing maternal anemia, improving preparation for birth, enhancing obstetric care, and promoting safe delivery services.
- **HIV/AIDS.** USAID has become the global leader in the international fight against HIV/AIDS. USAID programs have already helped alter the course of HIV/AIDS epidemics in a number of countries, including Zambia and Uganda, two of the countries first and most seriously affected. In others, such as Senegal, USAID support has helped countries with low HIV prevalence rates keep them low.
- **Malaria.** To prevent malaria, USAID in FY 2000 launched NetMark, an innovative approach to promoting and distributing insecticide-treated netting in Africa through the commercial sector. In partnership with WHO, the U. S. Centers for Disease Control and Prevention (CDC), and other agencies, USAID also helped establish the Mekong Roll Back Malaria Initiative in the countries of the Mekong River basin in Southeast Asia to monitor the emergence and spread of multidrug-resistant malaria.
- **Tuberculosis.** Since 1998, USAID has supported the development of cost-effective approaches for the surveillance and treatment of multidrug-resistant TB, a major problem worldwide. USAID has also promoted the Directly Observed Treatment Short Course (DOTS) therapy, which has achieved high success rates in developing countries. In addition, USAID has worked with the worldwide Stop TB Initiative to strengthen the implementation of DOTS in highly affected countries.
- **Basic Education.** USAID has basic education programs in 24 countries to help increase enrollment rates and reduce the gender gap in education through policy reforms, institutional development, quality improvement, and community participation. In one such program in Morocco, the percentage of girls reaching sixth grade in target schools more than doubled between 1995 and 2000.

## Partnerships

The dimensions of international public health challenges such as HIV/AIDS are far too vast for any single donor or government to confront alone. As disease prevention and control become more complex, USAID encourages more governments, international agencies, multilateral and bilateral partners, and private-sector foundations and corporations to become involved in addressing these critical issues. USAID collaborates



closely with a broad spectrum of partners – public and private – including host country governments, WHO, UNICEF, the World Bank, CDC, other U. S. Government agencies, private voluntary/nongovernmental organizations, universities, and foundations. USAID has also established strong relationships with a number of important bilateral donors, including Japan, the United Kingdom, and Canada.

During FY 2000, the Agency significantly strengthened its collaboration with a number of foundations active in health and nutrition. Of particular note is the Bill and Melinda Gates Foundation, whose large strategic investments have made it an important new partner in global health. USAID has collaborated with the Gates Foundation on a range of new initiatives, including the launch of GAVI and the design of a new global micronutrient fortification coalition. With the Rockefeller Foundation, USAID is cofunding the development of clinical epidemiology and research networks. USAID is also working or in discussion with other foundations including the Wellcome Trust (vitamin A), the Shell Foundation (indoor air pollution and acute respiratory infections), the Elizabeth Glaser Foundation (preventing maternal-to-child transmission of HIV/AIDS), and the UN Foundation (polio eradication and IMCI in Africa).

The Agency continues to forge new alliances, such as GAVI, and to support key international efforts, such as the WHO's Global Strategy for the Containment of Antimicrobial Resistance. USAID also encourages private sector involvement, as in the NetMark project to combat malaria in Africa. Many of these activities are described in this report.

### **Accelerating Progress**

Accelerating progress in improving the lives of children and safeguarding the world against HIV/AIDS and other infectious diseases requires sustained international attention and funding. While the trends of recent decades in child survival have been positive, much remains to be done, especially in areas where progress has lagged or even reversed direction in recent years. The growing threats of HIV/AIDS, malaria, and tuberculosis are also of worldwide concern.

To confront these challenges, USAID will reinforce its support of proven child survival interventions such as immunization, breastfeeding, and vitamin A supplementation to accelerate progress in reducing under-five mortality. USAID will also implement expanded responses to HIV/AIDS, TB, and malaria that will not only help control these diseases worldwide but also build local capacity to implement new programs and sustain progress. In addition, USAID will enhance its efforts to assist children made vulnerable by HIV/AIDS and increase its support for basic education. The global effort to improve the health and well-being of millions depends on these efforts and the ongoing support of USAID and other international donors and partners.

## I. Child Survival and Maternal Health

### A. Trends In Child Survival

*Progress has been made in child survival.*

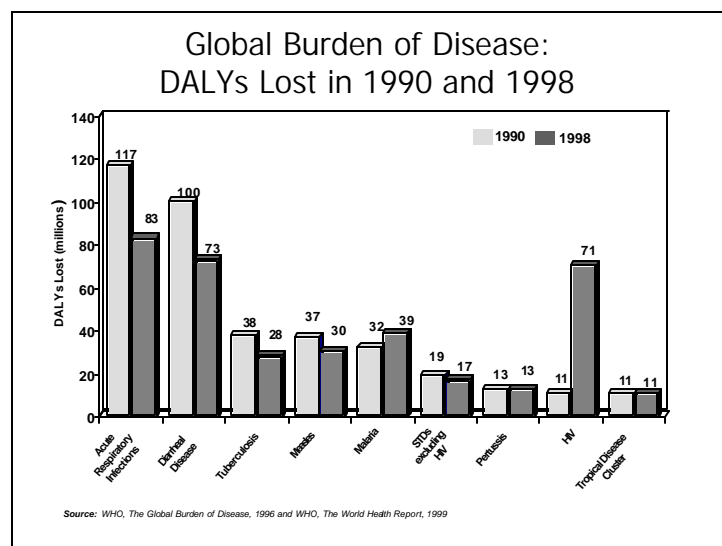
Over the past 20 years, infant and under-five mortality rates in developing countries have been steadily declining. According to WHO, the annual number of early childhood deaths fell from an estimated 15 million in 1980 to about 11 million in 2000. Globally, infant mortality has declined to 60 deaths per 1,000 births, just above the goal of 50 established for 2000 by the 1990 World Summit for Children.

*Progress has been uneven, both globally and in USAID-assisted countries.*

**Global Progress.** While substantial progress has been made, it has been uneven across regions. According to UNICEF, the Americas registered the lowest infant mortality with a rate of about 30 deaths per 1,000 births, and Asian countries were close to 50 deaths per 1,000 births. Africa, however, showed little progress over the past decade, with rates remaining near 100 infant deaths per 1,000 births.

**Global Burden of Key Diseases.** The figure below depicts trends in the global burden of key diseases as calculated from estimated loss of disability-adjusted life-years (DALYs), an index of total life-years lost due to mortality and disability. Although progress occurred in the 1990s, the infectious childhood diseases that remain common in poor countries – respiratory and diarrheal diseases, malaria, and measles and other vaccine-preventable diseases – still make up major shares of the global burden of diseases. The figure also shows an increased burden from HIV/AIDS and, to a lesser degree, malaria.

Figure 1



**Progress in USAID-Assisted Countries.** The Demographic and Health Surveys funded by USAID have estimated mortality among children under 5 years old since about 1985. Survey data from USAID-assisted countries, which are generally among the least developed in their regions, indicate similar trends to the global averages (figures 2-4). Under-five mortality has improved in USAID-assisted countries in both the Asia/Near East and Latin America/Caribbean regions. Reflecting global trends, it has increased or remained steady in many countries in Africa.

Figure 2

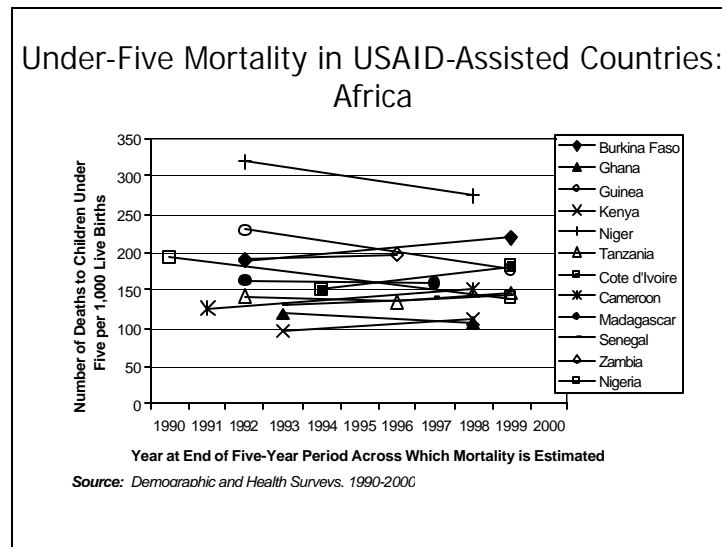


Figure 3

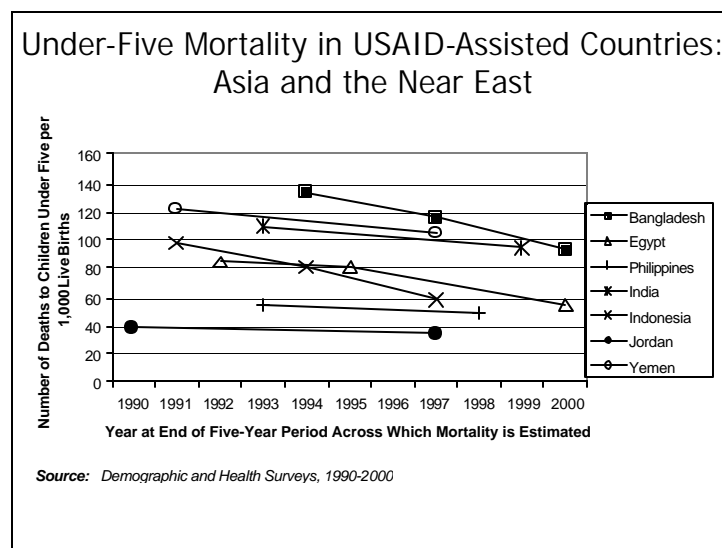
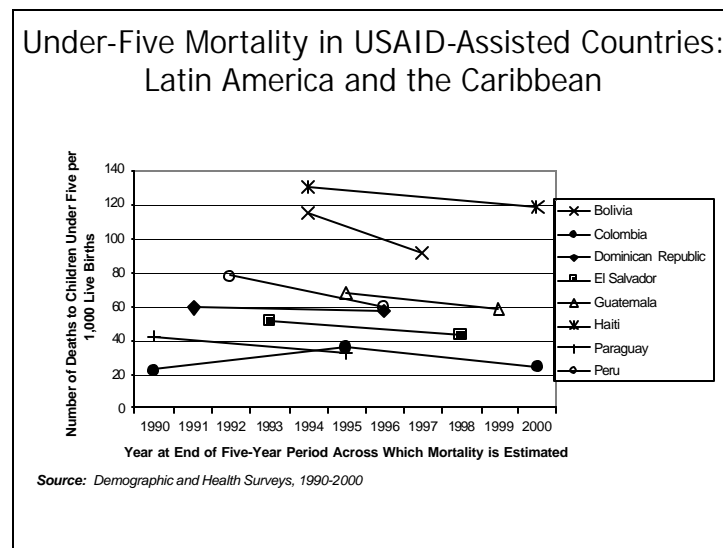


Figure 4



**Under-Five Mortality Increases in Africa.** HIV/AIDS is an important cause of under-five mortality in some African countries and is projected to become even more important in the future. However, USAID's analysis of rising infant and under-five mortality rates in Africa indicates that they predated the full impact of HIV/AIDS. The increasing mortality shown for some countries in figure 2 is more likely explained by declining or flat levels of immunization, breastfeeding, and other key health interventions. This suggests that failure to maintain the quality of basic health services was instrumental in reversing gains in infant and under-five mortality rates in Africa. These reversals will be exacerbated by the effect of HIV/AIDS.

*Child survival interventions supported by USAID and other donors have made major contributions to progress.*

USAID and other donors support the implementation of proven, cost-effective interventions to reduce high levels of infant and under-five mortality. These interventions include:

**Immunizations.** Universal childhood immunization against the six standard vaccine-preventable diseases (diphtheria, pertussis, tetanus, polio, measles, and TB) in all developing countries has the potential to save an estimated 1.7 million lives annually.

**Oral Rehydration Therapy (ORT).** ORT is a proven intervention for preventing childhood deaths from dehydration due to diarrhea. According to WHO, the number of annual deaths among children less than 5 years old attributable to diarrhea fell from an estimated 4.6 million in 1980 to about 1.5 million in 1999. Case studies in Brazil, Egypt, Mexico, and the Philippines confirm that increased use of ORT is concomitant with marked falls in mortality.

**Vitamin A Supplementation.** USAID-funded research in the 1980s showed that vitamin A supplementation in areas of endemic vitamin A deficiency can reduce childhood mortality by as much as 30 percent, even in the absence of other interventions.

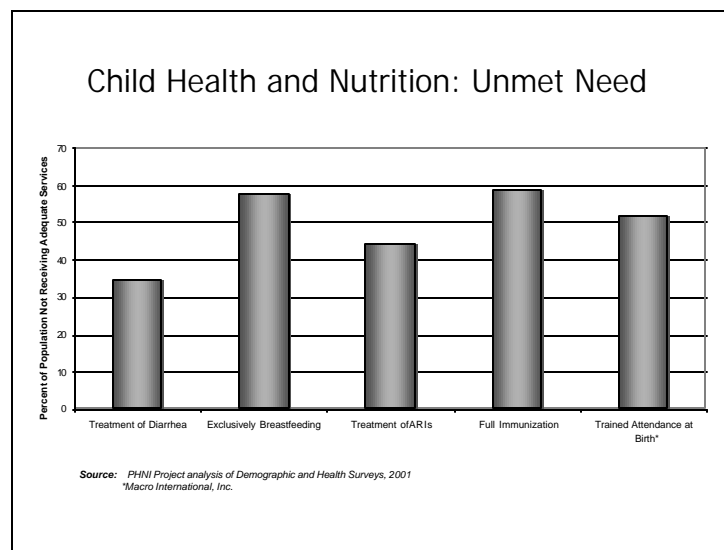
**Breastfeeding.** Research continues to demonstrate the lifesaving impact of breastfeeding. In recent studies, a lack of breastfeeding was associated with up to a sixfold increase in mortality in the first year of life and a up to a 2.5-fold increase in the second year of life.

**Treatment of Acute Respiratory Infections (ARI).** Research has demonstrated that simple ARI treatment with oral antibiotics, at a cost of 25 cents per dose, can be safely delivered at the community level and resolve most infant and childhood pneumonias.

*There is substantial unmet need for child health and nutrition interventions.*

Figure 5 depicts the unfinished agenda for child survival. Despite the existence of the above cost-effective interventions to reduce infant and under-five mortality, there is substantial unmet need for these lifesaving tools. Based on analyses of Demographic and Health Surveys, the figure shows that unmet need ranges from about one-third in the case of children not receiving needed ORT to the almost 60 percent of infants who do not receive adequate breastfeeding or all recommended immunizations.

Figure 5

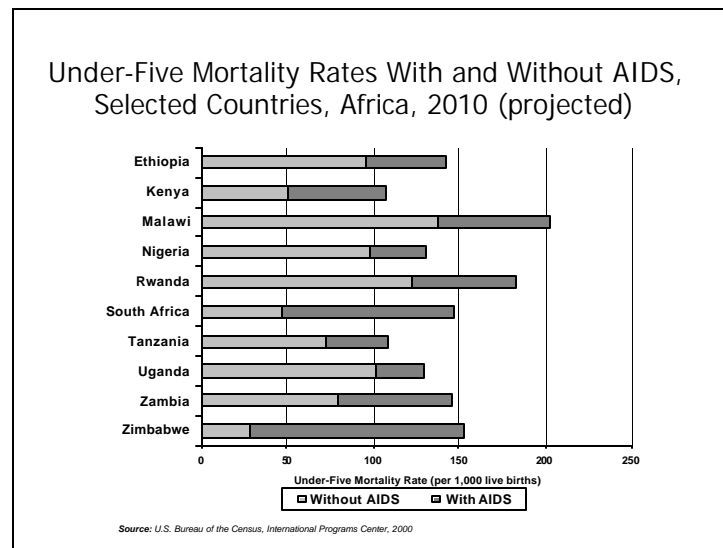


*We have new challenges to child survival.*

These challenges include:

**HIV/AIDS.** Projections made by the U. S. Bureau of the Census indicate that reversals in child survival in Africa will be compounded by the effect of HIV/AIDS. Figure 6 shows the predicted effect of AIDS on under-five mortality rates in the most heavily affected African countries. These countries are projected to experience marked increases in child mortality during the next 10 years, further reversing the gains of the last two decades.

Figure 6



**Malaria.** The increasing burden of malaria is another threat, especially in southern Asia and Africa. Most of malaria's victims are young children, and it also contributes to low birthweight. The malaria parasite's increasing resistance to chloroquine, the most commonly used drug against the disease, is an important factor leading to increased morbidity and mortality.

**Antimicrobial Resistance.** The increasing resistance of disease-causing microbes to the drugs used to combat them is becoming an important contributor to infant and child mortality. Many important bacterial diseases (such as those that cause childhood pneumonia) are already resistant to first-line drugs or are becoming so at alarming rates. HIV is increasingly resistant to first-line antiretroviral drugs, and in some countries almost a quarter of new TB cases exhibit multidrug resistance.

***We have new and under-utilized tools to reduce under-five mortality.***

In addition to the proven tools available to address under-five mortality, there are new interventions that have the potential for additional impact on children's health and survival. These include:

**New Vaccines.** Realizing that under-utilized vaccines against *Haemophilus influenzae* type b, hepatitis B, and yellow fever could save at least 500,000 child lives per year, the

major global partners, including industry, are working together through GAVI to incorporate their use in the developing world. New or improved vaccines for pneumococcus, rotavirus, meningococcal meningitis, and respiratory syncytial virus could save millions more. A malaria vaccine, when developed, has the potential to save over 1 million lives a year.

**New Neonatal Health Interventions.** New and promising interventions, such as community-based treatment of infections in newborns, could save many lives in addition to those already saved by immunizations, ARI treatment, ORT, and other current interventions. Existing neonatal interventions like maternal tetanus immunization are under-utilized. Mortality trends show that a substantial portion of infant mortality occurs in the first month of life. As the causes of later infant mortality are reduced, the neonatal share of deaths becomes even larger.

**Increased Use of Micronutrients.** A wide range of micronutrients beyond vitamin A can be made available through supplementation and food-based programs to contribute to improved growth, development, and health for children in developing countries.

**Environmental Health Approaches.** New approaches that focus on hygiene improvement and incorporate hygiene promotion, water supply and sanitation, and supportive policies also show promise as cost-effective interventions.

**Preventing Maternal-to-Child Transmission of HIV/AIDS.** Voluntary counseling and testing of pregnant women, improved prenatal care, and appropriate therapies could significantly reduce maternal-to-child transmission of HIV/AIDS.

### **Accelerating Progress in Child Survival**

At the 1990 World Summit for Children, world leaders undertook a joint commitment to save children's lives. This landmark meeting set forth a series of objectives to decrease infant and child morbidity and mortality. Since then, substantial progress has been achieved.

Many of the Summit's goals, however, have not been met, especially in the poorest countries with the weakest health care systems. The United Nations General Assembly will sponsor a Special Session on Children in September 2001 to move the agenda forward. The Session will offer an opportunity to reinforce and promote time-tested and new interventions that have great potential for saving lives. The world needs to complete the unfinished agenda of the 1990 Summit and confront the new health threats facing children. With adequate funding and strong commitment, we have the tools to meet these goals.

### **USAID's Child Survival and Maternal Health Program**

As the largest bilateral donor in health, USAID has a comprehensive set of programs to safeguard the lives and promote the health of children and mothers. These programs include:

- Immunizations, including polio eradication
- Diarrheal disease control
- Treatment and prevention of acute respiratory infections
- Integrated management of childhood illness
- Reduction of micronutrient deficiencies and malnutrition and promotion of breastfeeding
- Promotion of maternal and neonatal health
- Programs to strengthen health policies and systems to maximize the impact of health interventions

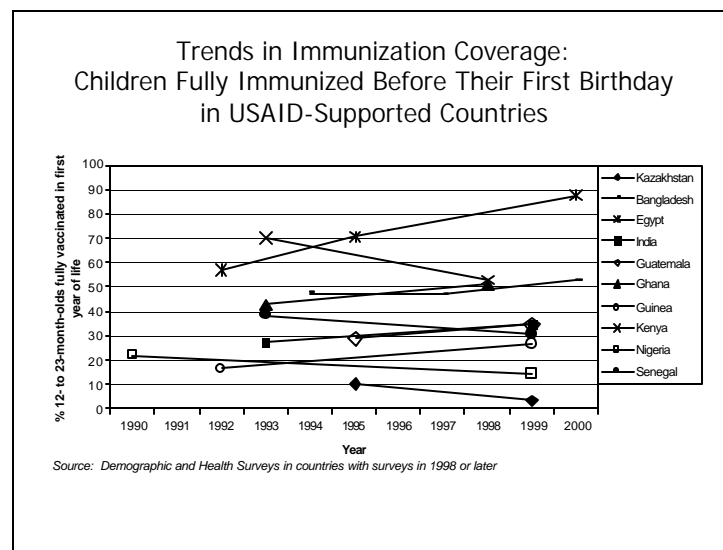


## I. Child Survival and Maternal Health

### B. Immunizations

Childhood vaccinations are one of the most cost-effective health care interventions. In countries with high vaccination coverage, the traditional public health threats of measles, diphtheria, and pertussis have greatly diminished. Nonetheless, about 3 million children die annually from vaccine-preventable diseases, and 30 million infants go unvaccinated.

Over the last few years, USAID has monitored vaccination coverage rates in many low-income countries of the developing world. In too many countries, the trend indicates stagnating or declining coverage, a finding reaffirmed by a General Accounting Office report and seen in figure 7. In response, USAID has strengthened its support for immunization programs.



**Figure 7.** This graph shows trends from the 1990s in the percentage of 12- to 23-month-old children in USAID-supported countries who received all of their immunizations before their first birthday. The results were mixed, with six of 10 showing mostly moderate improvements.

In early FY 2000, USAID worked with other multilateral, bilateral, private sector, and private foundation partners to launch the Global Alliance for Vaccines and Immunization (GAVI). This alliance provides support for strengthening immunization infrastructures and for introducing under-utilized vaccines such as hepatitis B into national vaccination programs. GAVI's target is to achieve at least 80 percent vaccination coverage in all countries by 2005. To reinforce the impact of this global alliance, USAID also launched its Boost Immunization Initiative in FY 2000 to support immunization systems and improve vaccination coverage in more than 15 USAID-assisted countries.

## ***USAID Approach***

To reverse the trend of lagging vaccination coverage rates, USAID concentrates its programming in such critical areas as increasing demand for immunization; improving the quality of immunization services; strengthening the planning and management capacity of national immunization programs; and building partnerships among institutions and donors that implement and support immunization efforts.

Specifically, USAID focuses on strengthening weak components of immunization systems. Its activities include initiatives and assistance in:

- Finding new means of vaccine financing
- Undertaking international and national program reviews
- Supporting national interagency working groups
- Improving disease surveillance
- Supporting communication programs
- Conducting training in service delivery and logistics
- Improving vaccine and injection safety
- Developing new technologies

## ***Key Achievements***

**Boost Immunization Initiative.** For the first year of this initiative, USAID had two objectives – first, to increase Agency funding for immunization, and second, to plan enhanced vaccination programs in as many countries as possible (with the understanding that it will take several years to see concrete gains in vaccination coverage). In FY 2000, USAID reversed years of flat or declining funding and increased its allocations for immunization programs by about \$9 million (pending Agency confirmation). The increase brought total funding from about \$25 million to about \$34 million, not including ongoing funding for polio eradication. As a result, USAID missions in Africa have now designed new or enhanced existing immunization programs in the Democratic Republic of the Congo, Ethiopia, Ghana, Guinea, Madagascar, Mali, Mozambique, Nigeria, Senegal, Uganda, and Zambia. In Latin America and the Caribbean, immunization programs in the Dominican Republic and Guatemala have received support from the initiative, and in Asia, Cambodia has received assistance. In five of these countries, USAID missions are funding immunizations for the first time. Combined, these 14 countries represent an annual birth cohort of over 14.7 million children, of whom only 43 percent become fully immunized, according to UNICEF. In these countries, impacts in terms of sustainable increases in immunization coverage and reduced disease burden can be expected within two to three years.

**Global Alliance for Vaccines and Immunization (GAVI).** In one year, GAVI has had a dramatic impact on international health. At the global level, it has created a shared vision for all supporters of immunization and raised significant new funding for national immunization programs. At the country level, GAVI has improved donor interest and program coordination. Twenty-four countries have been fully or conditionally approved for support from GAVI's Global Fund for Children's Vaccines to introduce new vaccines and/or strengthen their immunization systems. Full approvals will commit as much as \$200 million of donor funding over five years. USAID has strongly supported and played leading roles in developing and implementing GAVI by providing technical assistance and direct financial contributions in the areas of capacity building, immunization financing, and advocacy.

**Technologies.** In the 1990s, USAID's Health Technologies Program (and its agreement with Becton, Dickinson and Company) made Auto-Disable syringes, which can only be used once, commercially available to national immunization programs in the developing world. At first, some programs failed to recognize the importance of improving injection safety, and many were slow to procure these syringes because of their cost. Two events, however, changed this perception – first, the advocacy efforts of the Safe Injection Global Network, created by USAID and other partners, and second, GAVI's decision (supported by USAID) to use only Auto-Disable syringes for all vaccines financed by the Global Fund for Children's Vaccines. As a result, Auto-Disable syringes are projected to deliver almost 50 percent of all immunizations by 2005, making national vaccination programs much safer.

**National Immunization Plans in Africa.** Because of declining vaccination coverage in many African countries, USAID collaborated with WHO's African regional office in developing or improving national plans for childhood immunization and in developing a regional immunization plan of action. As a result, 35 of 36 USAID-assisted African countries now have national immunization plans.

**Enhancing Immunization in Ethiopia.** In **Ethiopia**, where more than 10 percent of children die before their first birthday, USAID assists with efforts to strengthen the existing immunization infrastructure, which has been weakened by years of civil strife. Working in 10 densely populated districts with low immunization coverage, USAID trains immunization service providers in safe injection practices, data collection, and analysis. Additional strategies include social mobilization and integrating immunization efforts with maternal and child health services. As a result, coverage for the first dose of diphtheria, pertussis, and tetanus (DPT) vaccine increased in eight of 10 targeted zones by about 7 percent, reversing several years of declining coverage.

**Progress in Latin America and the Caribbean.** In the Latin America/Caribbean region, **Bolivia, Guatemala, Haiti, Nicaragua, and Peru** (all countries with a high USAID priority) reached their targets of 95 percent measles vaccination coverage in 1999. They also improved coverage for tetanus toxoid vaccinations. In **Bolivia**, USAID supports technical assistance to improve epidemiological surveillance and vaccine

logistics systems, with a special emphasis on delivery to remote areas. In both 1999 and 2000, measles and DPT3<sup>1</sup> coverage exceeded USAID/Bolivia's goal of 95 percent.

### **Immunization Information System in Eastern Europe's New Independent States.**

After the breakup of the Soviet Union, the new independent states were left with cumbersome and unworkable health information systems. In **Ukraine**, the failure to track and monitor immunizations contributed to a diphtheria epidemic in the 1990s. In 1997, USAID launched a pilot program to introduce a streamlined information system to track immunization coverage, vaccine distribution and wastage, and the number of children refused vaccination due to contraindications. The system, developed in one Ukrainian district, has now been adopted by the central government and is being expanded to the entire country. As a result, more children are being immunized on a timely basis. Vaccine supply has been improved so that all regions have access to potent vaccines, and vaccine wastage has gone down. The countries of **Georgia**, **Belarus**, and **Moldova** have expressed interest in developing a similar program, and WHO's regional European office is exploring ways to introduce the system throughout the region.

### ***Future Perspectives***

USAID is taking a leading role in supporting improved routine immunization systems. This is the rationale for the Boost Immunization Initiative and USAID's strong support of GAVI. Without strong national immunization systems, deaths from vaccine-preventable diseases will remain high, and under-utilized vaccines such as hepatitis B and *Haemophilus influenzae* type b (Hib) vaccines cannot be effectively utilized in developing countries. USAID will also advocate with other donors to increase their funding for routine immunization programs and to make immunizations a cornerstone of international development efforts.

USAID is also working with WHO, UNICEF, and others to develop a global strategic plan for measles immunization. USAID is advocating for a program that aims at reducing mortality through high levels of routine vaccination coverage and well-planned supplementary immunization activities rather than for an ambitious, costly effort to eradicate this disease. USAID will also continue to work with WHO, UNICEF, Rotary International, CDC, and other partners to ensure that funding for the final phases of polio eradication contributes to strengthened routine immunization infrastructures and systems in developing countries.

<sup>1</sup> Three doses of diphtheria, pertussis, and tetanus combined vaccine by age 1, which represents full DPT vaccination.

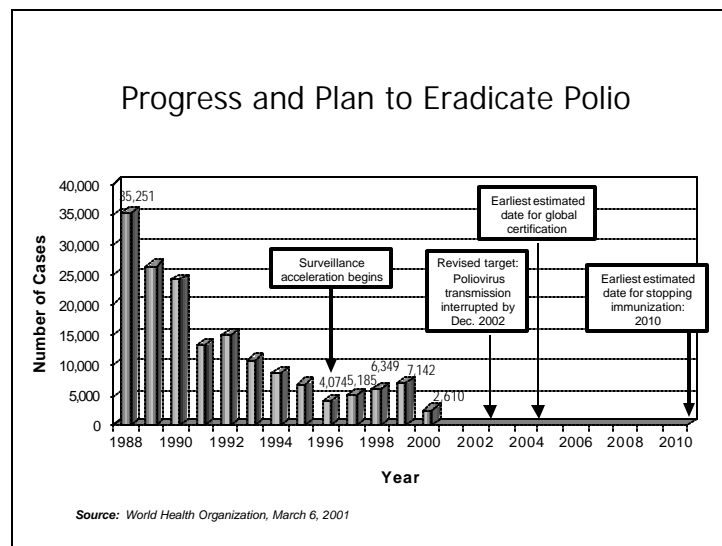
## I. Child Survival and Maternal Health

### C. Polio Eradication Initiative

In the 1980s, prior to the worldwide initiative to eradicate polio, an estimated 350,000 polio cases occurred annually. Only 10 percent of these were officially reported because of weak surveillance systems, and the disease was found in more than 130 countries. In 1988, the U.S. Government joined with other nations at the World Health Assembly to adopt a global resolution to eradicate polio and to do so in the context of improving national immunization and disease control programs. The initiative forged a partnership of unprecedented size and strength among such agencies as WHO, UNICEF, CDC, Rotary International, USAID, and other bilateral donors. This alliance was dedicated to the goals of interrupting poliovirus transmission by 2000 and achieving global certification of a polio-free world by 2005. Achieving these goals will not only eradicate polio but also lead to global savings of more than \$1.5 billion annually once immunizations against polio can stop.

Figure 8 shows the tremendous progress that took place in the 1990s. This progress continued in 2000. Globally, the number of polio cases reported as of January 2001 was about 2,400, down from 7,142 in 1999. Geographically, the disease is increasingly localized. At the end of 1999, only 30 countries had endemic poliovirus, down from 50 countries in 1998. Substantial polio transmission continues in only a small number of endemic countries in Asia and Africa (approximately 20 at the end of 2000).

Figure 8



Although the original target of interrupting wild poliovirus transmission by December 2000 was not achieved in all countries, significant benchmarks were realized. The Western Pacific Region (including China) was certified polio-free in October 2000, seven

years after this goal was first reached in the Americas. The European region has not had a case of polio in over two years and is working to improve surveillance to certification-level standards in all of its 51 countries. In Africa, 17 Central and West African countries synchronized National Immunization Days (NIDs) to reach over 76 million children, and most of South and East Africa remained polio-free for the third year in a row even as surveillance improved. Some of the most dramatic improvements occurred in the South East Asia region, where, with high-quality surveillance, cases of wild polio declined from 1,160 in 1999 to 204 as of November 2000.

Many of the challenges facing the global polio eradication program are beyond the control of implementing organizations such as WHO and UNICEF. In a number of countries, wars or local conflicts are obstacles to vaccinating children and to establishing regular, high-quality surveillance. In the war-torn areas of Afghanistan, Angola, Chechnya, the Democratic Republic of the Congo, Kosovo, Liberia, and Sierra Leone, great strides have been made toward eradication, but more needs to be done to improve access to children and to consistently maintain quality in all aspects of polio programming throughout the year. Other factors in the delay in meeting the December 2000 target for interrupting poliovirus transmission included vaccine demand outstripping supply (resulting in delays in conducting all planned rounds of NIDs), funding shortages, wavering political commitments in some areas, and misinformation campaigns about vaccine safety. The recent outbreak of vaccine virus in the Dominican Republic and Haiti, while not affecting progress for worldwide eradication, underlies the need to maintain high routine vaccination coverage for polio. The outbreak also raises important research questions that will need to be answered before polio immunizations can be stopped.

### ***USAID Approach***

The Agency's continuing support for polio eradication – \$25 million in FY 2000 – is aimed at improving the planning, implementation, and assessment of NID campaigns, surveillance, and laboratory performance in nearly all the endemic countries of Africa, South Asia, and Europe. USAID's support for the polio eradication activities of the headquarters and regional offices of WHO and UNICEF gives the Agency an even broader reach in this truly global initiative.

The Agency is also at the forefront of efforts to promote a longer-term legacy from investments in polio eradication. Reducing death, disability, and related costs are themselves worthy reasons to eradicate polio, but USAID also seeks to use the skills, infrastructure, and staff and laboratory capacity associated with polio eradication to strengthen routine immunization and health care systems. In collaboration with other partners, USAID has promoted tools to evaluate and monitor polio eradication activities for use in other immunization programs.

Coordination with other donors, including the Government of Japan under the U.S.-Japan Common Agenda, continues to increase resources, maintain financial and political

commitments, and promote the links between polio eradication and overall improvements in immunization and disease control programs.

### ***Key Achievements***

Assistance to the hardest-to-reach areas of **India, Bangladesh, Nepal, Angola, and Uganda** rapidly expanded in FY 2000 through the CORE Group Polio Project, a joint effort launched by the CORE Group (a consortium of 36 U.S.-based private voluntary organizations) and USAID. Collectively, the CORE Group's polio eradication subgrants benefit more than 15 million children under age 5 in the poorest performing districts in endemic countries. CORE's efforts have identified thousands of "zero-dose" children (children who have never received oral polio vaccine, either via routine immunization or through NIDs) and provided vaccination and other health care services. The CORE Group's nongovernmental organizations are required to supplement USAID's financial support with a matching contribution of 25 percent, thus bringing additional resources to the polio program. One CORE member, CARE, has made polio eradication an organizational priority.

Progress also took place toward developing an integrated disease detection kit. The kit will be used by nongovernmental and volunteer organizations to help rapidly identify and report cases of acute flaccid paralysis (a signal condition for polio) and other reportable, preventable childhood diseases.

Studies to determine the most cost-effective methods of implementing polio strategies continue to help inform key policy decisions and guide eradication activities. Research conducted by the Johns Hopkins University is likewise informing global decisions on when and how to stop polio immunization once polio-free certification is achieved globally.

Several of USAID's technical projects have contributed specialized expertise from collaborating partners in support of the global initiative. The Voice of America (VOA) radio, reporting in 19 languages, delivered its 2000th broadcast related to polio eradication. VOA has conducted listener contests, involved local fan clubs in supporting activities, and recorded public service announcements from famous international and regional sports stars, including Dikembe Mutombo, a member of the Atlanta Hawks professional basketball team and native of the Democratic Republic of the Congo. The VOA director has been an "ambassador at large" for the polio program. Similarly, the Peace Corps is increasingly engaged in polio eradication activities, and its director has also become an advocate for increased participation.

USAID staff play an active role in polio eradication. Their participation in national, regional, and global interagency coordination committees provides opportunities to raise questions, share lessons learned, and improve budgeting, planning, and monitoring of this enormous and complex undertaking. USAID personnel have been independent observers in NIDs and surveillance reviews in most of the remaining endemic countries. Agency

staff visited the Democratic Republic of the Congo to help negotiate "days of tranquility," or cease-fires, with warring factions in that country during a recent NID. The visit also provided an opportunity to observe NID activities and provide recommendations for accelerating eradication efforts. It followed an earlier visit to Angola, demonstrating USAID's efforts to conduct intensified NIDs and surveillance in endemic countries where conflicts hinder such activities.

### ***Future Perspectives***

Recognizing the need to work in any country not yet polio-free, USAID has invoked the "notwithstanding" language, which allows the Agency to support activities in any country notwithstanding any restrictions, should it become necessary. No country is free from the risk of polio until it is proved to be absent from all countries and all regions are certified polio-free. Therefore, national boundaries cannot be a barrier to eradication. Although USAID continues to focus its efforts in countries where it has a presence, this situation can change, and the Agency is poised to assist the global effort in any country where it becomes necessary.



## **I. Child Survival and Maternal Health**

### **D. Reducing Micronutrient Deficiencies and Malnutrition and Promotion of Breastfeeding**

Malnutrition underlies more than half of early childhood deaths in developing countries. Eight of every 10 malnutrition-related deaths occur in children with mild to moderate malnutrition. Programs directed solely at severe malnutrition, therefore, have only a limited impact on child survival. USAID-funded Demographic and Health Surveys indicate that moderate malnutrition often remains high even in countries that are able to reduce severe malnutrition.

When children survive, malnutrition compromises their physical and cognitive development and limits their ability to achieve maximum productivity as adults. Malnutrition thus limits national socioeconomic development. It also has an intergenerational effect, which becomes evident as undernourished girls become malnourished women who give birth to low-birthweight babies deprived of essential nutrients both before and after birth. Low-birthweight babies become undernourished children, and the cycle of malnutrition continues. At the same time the depletion of maternal nutrients compromises their mothers' own health.

### ***USAID Approach***

USAID's policies and programs emphasize three strategies:

- Prevention of mild to moderate malnutrition, including micronutrient deficiencies
- Multisectoral actions for breastfeeding support
- Improved nutrition for adolescent girls and women in recognition of the importance of intergenerational nutritional impact

These interventions promote:

- Improved micronutrient intake
- Optimal breastfeeding
- Improved dietary practices for young children, girls, and women
- Improved nutrition policy

In addition, many of USAID's Food for Peace Food Aid programs directly promote maternal and child health and nutrition.

### **Micronutrients**

USAID's enhanced Vitamin A Effort (VITA), launched in 1997, elevated vitamin A supplementation to a priority intervention within the Agency's child survival programs. Vitamin A deficiency affects more than 100 million children worldwide. USAID-

supported research has confirmed that reducing vitamin A deficiency in children can decrease overall child mortality by 23 to 34 percent. This reduction occurs even in places where prevention and treatment of infectious childhood diseases such as diarrhea and measles are ineffective. The research has led to the development of vitamin A capsule supplementation programs in many countries. In addition, recent data from Nepal suggest that vitamin A given to mothers may substantially reduce maternal mortality.

USAID works with its partners to reduce other micronutrient deficiencies, particularly iodine and iron. USAID, UNICEF, and Kiwanis International support the global initiative to eliminate iodine deficiency through universal salt iodization by providing technical assistance to national programs and strengthening monitoring and evaluation processes. Anemia, caused by a lack of dietary iron, affects over 2 billion women and children and has profound consequences for health and productivity. Reducing anemia is complicated by the need to address malaria, parasitic infections, and other chronic illnesses at the same time as addressing the iron deficiency ( plus other possible micronutrient deficiencies as well). USAID promotes integrated health and nutrition approaches to anemia, including antenatal iron/folate supplementation, case management of malaria, and anthelmintic drugs to control intestinal worms.

Food fortification, a medium-term approach to reducing micronutrient deficiencies, is an area of increasing activity. USAID has gained considerable experience in standard setting, perfecting fortification technologies, establishing quality control for production and distribution, and helping countries develop legislation and enforcement procedures.

In addition, rapidly accumulating evidence from USAID-supported studies suggests that zinc also may have profound effects on child morbidity and mortality. Including zinc in supplementation and fortification programs is a future possibility.

In FY 2000, USAID allocated over \$25 million in support of micronutrient activities.

### ***Key Achievements in Micronutrient Programs***

**Vitamin A Supplementation Through NIDS.** More than 60 developing countries have launched broad-based vitamin A supplementation by linking vitamin A distribution with National Immunization Days (NIDs) conducted as part of polio eradication programs. USAID has supported this linked distribution in 15 countries.

**Vitamin A Supplementation Apart from NIDs.** As developing countries achieve immunization goals, USAID and other donors anticipate that NIDs campaigns will be phased out. In the absence of NIDs, semiannual distributions of vitamin A using health systems and other infrastructure have proved an effective means of getting this essential micronutrient to children. USAID's advocacy and support for this approach have attracted global attention to sustainable vitamin A supplementation strategies and have had a significant public health impact.

In FY 2000, USAID helped 13 countries conduct semiannual vitamin A capsule distribution to fight vitamin A deficiency. Of these, six countries began these programs for the first time. Seven of the 13 countries achieved national coverage of over 50 percent. Some highlights from these programs follow.

- In 1996, **Niger** was the first West African country to initiate vitamin A capsule distribution with NIDs. In 1999, it was the first country in Africa to organize “National Micronutrient Days” to introduce a second distribution of vitamin A in between NIDs. Two distribution rounds took place again in 2000, with coverage estimated to exceed 80 percent.
- Following the completion of a national vitamin A prevalence survey, the Nutrition Unit of **Ghana**’s Ministry of Health enlisted USAID support for scaling up experimental supplementation programs in three northern provinces to the whole nation. The national program was launched in July 2000. Surveys following the first distribution indicate that coverage among children 6 months to 59 months of age approached 90 percent.
- In 1997, a national survey in **Zambia** found that two of every three children 6 months to 5 years of age had vitamin A deficiency. USAID supported the Zambia Central Board of Health and the National Food and Nutrition Commission in establishing periodic “Child Health Weeks” featuring the distribution of vitamin A. In August 2000, coverage surveys in two districts indicated that nearly 90 percent of children had received capsules.
- In 2000, **the Philippines, Indonesia, Bangladesh, Nepal, and Nicaragua** all continued successful distribution programs initiated in previous years. In **Cambodia, Ethiopia, Guinea, Mali, Mozambique, Senegal, and Uganda**, USAID helped lay the groundwork for new national distribution programs beginning in 2001.

### **Other Micronutrient Programs**

**Food Fortification.** In **Nicaragua**, USAID helped the government and sugar industry work together to develop a plan to fortify sugar with vitamin A. Legislation mandating universal fortification was issued in 1999. The industry made the initial capital investment to build a pre-mix preparation facility, and the Government helped the industry get a loan to acquire supplies for the first year. Nicaragua’s seven sugar refineries began fortifying sugar in January 2000, and fortified sugar began reaching consumers in March. A rotating fund to pay for the fortification will be set up with the proceeds from a 2 percent increase in the retail price of sugar.

In **Zambia**, USAID supported national legislation mandating fortification with vitamin A. USAID trained laboratory personnel in techniques to verify fortification and inspectors in verification procedures, which enabled the government to enforce the legislation. With USAID’s continuing support, all sugar produced for domestic consumption is now fortified with vitamin A.

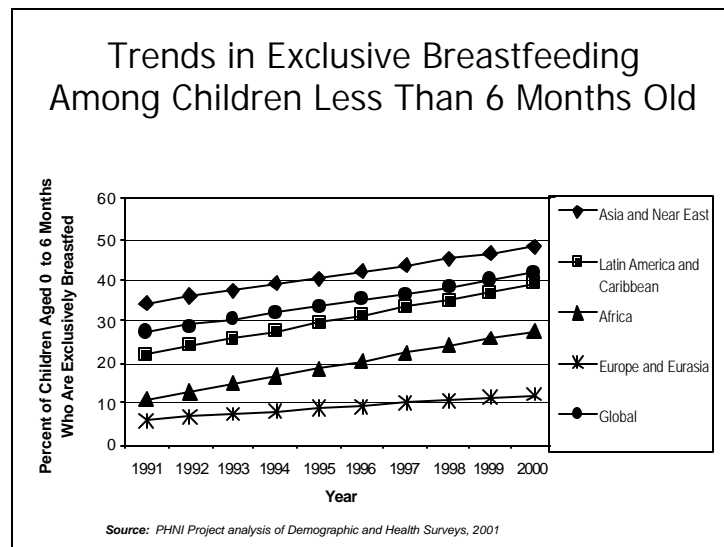
**Iodine.** USAID contributes to the global effort of UNICEF, Kiwanis International, national and local nongovernmental organizations, and salt industries to address iodine-deficiency disorders. USAID supports technical assistance, social mobilization, planning, and quality assurance to address these disorders in 11 countries. As a result of the global effort, 68 percent of households in countries where iodine-deficiency disorders are prevalent now consume iodized salt.

**Zinc.** Mounting evidence shows that zinc, like vitamin A, is an essential nutrient. Zinc helps children mount effective responses to common, often deadly infections. USAID-funded studies in **India** have demonstrated that daily zinc supplementation in small-for-gestational-age babies reduces mortality by 75 percent. A USAID-supported pooled analysis of field trials of therapeutic zinc supplementation in children has documented a 24 percent lower probability of continuing diarrhea and a 42 percent lower rate of treatment failure or death in children with persistent diarrhea.

## Breastfeeding

Exclusive breastfeeding is a child's best nutrition during the first six months of life. Breast milk contains a host of specialized nutritional and immunological properties that enhance a child's growth and development, and it remains an excellent staple food for up to two years or more. Because of the importance of breastfeeding, USAID is developing an Agency-wide breastfeeding policy and guidance for field programs. Figure 9 on page 35 shows there have been steady increases in exclusive breastfeeding in all regions. In addition, DHS surveys show that countries with USAID breastfeeding programs have even greater increases in the percentage of infants exclusively breastfed.

Figure 9



Research continues to demonstrate breastfeeding's lifesaving impact. In recent studies, failure to breastfeed was associated with up to a sixfold increase in mortality in infancy and up to a 2.5-fold increase in mortality in the second year of life. Exclusive breastfeeding decreased acute respiratory infections by half and diarrhea by more than 80 percent when compared to partial breastfeeding. Even though there are risks of mother-to-child HIV transmission through breastfeeding, USAID continues to support breastfeeding for its nutritional, psychological, nurturing, and immunological benefits. Some research findings suggest that exclusive breastfeeding reduces the risk of mother-to-child HIV transmission by half when compared to infants who are not exclusively breastfed. This adds credence to the USAID stance of continuing support for optimal breastfeeding even in HIV-endemic areas.

### ***Key Achievements in Breastfeeding***

USAID has had key successes in breastfeeding programs in a number of different countries:

- In **Uganda**, USAID supports information, education, and communication activities to increase knowledge of maternal and child health. With the support of health workers and community advocates, various media activities helped increase the percentage of Ugandan mothers exclusively breastfeeding for six months from 19 percent in 1997 to 25 percent in 1999.
- Suboptimal breastfeeding practices exist in **Madagascar**, where 10 percent of infants die before their first birthday, and in **Ghana**, where only 25 percent of women initiate breastfeeding within the first hour after birth. Using advocacy, policy work, and a behavior change communications program, USAID worked with these countries' ministries of health and with private voluntary organizations, nongovernmental organizations, and other partners to address these problems at the community level. Six to nine months after program implementation, the exclusive breastfeeding rate in program areas increased from 44 to 68 percent in Ghana and from 45 to 68 percent in Madagascar.
- In the states of Bihar and Uttar Pradesh in **India**, 83 percent of mothers delay the initiation of breastfeeding for more than 24 hours. They also introduce liquids to their infant's diet too early and soft foods too late. These feeding practices lead to increases in infant morbidity and mortality. Innovations for feeding infants and mainstreaming behavior changes, introduced by USAID and its partners CARE and World Vision, have proved successful. Between January 1999 and October 2000, the rate of timely initiation of breastfeeding rose from less than 1 percent to 19 percent in CARE project areas and from less than 1 percent to 77 percent in World Vision project areas.

## **Nutrition Programs for Young Children, Girls, and Women**

USAID's nutrition programs for young children, girls, and women are primarily aimed at combating the intergenerational effects of malnutrition. They include innovative growth-monitoring programs, policy and advocacy initiatives, and community- and household-level programs to support improved dietary practices and other behavior changes.

### ***Key Achievements in Nutrition Programs***

**Adequate Childhood Growth.** In **Honduras**, USAID helped develop a preventive health and nutrition intervention, *Atencion Integral a la Ninez* (AIN). AIN involves communities and families with children under age 2 in efforts to maintain adequate growth. AIN focuses on household practices such as breastfeeding, increased feeding, home care of illness, and health referrals. AIN communities starting with the highest levels of malnutrition prevalence showed a decrease from 39 to 8 percent. AIN communities starting with medium levels of malnutrition prevalence showed a decrease from 25 to 10 percent. In AIN communities starting with low malnutrition levels, all children improved. Replication of the model is taking place in **Bolivia, the Dominican Republic, and Nicaragua**.

**Nutrition Policy and Advocacy.** USAID has developed an interactive nutrition computer program called "PROFILES." **Bolivia, Ethiopia, Ghana, Madagascar, Zambia,** and USAID's **West Africa** regional program have used PROFILES to promote national-level nutrition policy dialogue. Other donor agencies have adopted PROFILES as an effective tool for building consensus on the need for and potential impact of better nutrition programs and for advocating for investments in these programs.

## **Food for Peace Food Aid**

In FY 2000, the Food for Peace office of the Bureau for Humanitarian Response managed approximately \$1 billion in Title II food aid resources, including commodities rich in micronutrients. These resources, equivalent to over 2.1 billion metric tons of commodities, supported both emergency and nonemergency programs in low-income countries with food deficits. Nearly all of the emergency resources and more than 40 percent of the nonemergency resources were focused on improving food security through enhanced maternal health, child health, and nutrition programs. Emergency programs, benefiting over 17 million women, children, and other dependents, have primarily focused on the Horn of Africa, the Balkans, and North Korea. Nonemergency programs, benefiting over 20 million women, children, and other dependents, have emphasized sub-Saharan Africa and Asia.

### ***Key Achievements in Food Aid***

- An emergency program in southern **Sudan** reported reductions in malnutrition rates from 20 to 10 percent and 32 to 20 percent in two project areas as a result of food aid.
- A nonemergency PVO program has been increasing food security in remote highland and valley communities in **Bolivia** by integrating programs in agricultural productivity, community water and sanitation, maternal and child health and nutrition, and food for education. The integrated program has brought about reductions in the prevalence of chronic malnutrition among children from 53 to 33 percent and decreases in the prevalence of diarrhea from 34 to 6 percent.

### ***Future Perspectives***

USAID will continue to provide global leadership to promote optimal infant feeding and launch vitamin A and other micronutrient supplementation programs. USAID activities will strongly encourage developing countries to include these priority interventions, as appropriate, in their child survival programs. The Agency will also help form a global coalition of donors and other partners to promote food fortification and other enhancement activities to increase regular consumption of key micronutrients.

## **I. Child Survival and Maternal Health**

### **E. Acute Respiratory Infections, Control of Diarrheal Diseases, and Integrated Management of Childhood Illness**

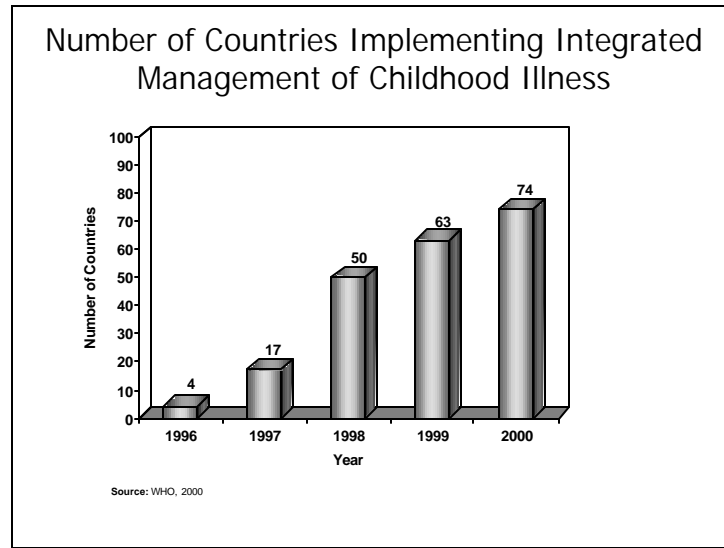
Acute respiratory infections (ARI) and diarrheal diseases are among the leading causes of death in children and recurring morbidity in surviving children. The most recent WHO estimates indicated that in 1999, 10.5 million deaths occurred in children less than 5 years of age, of which about 1.8 million (17 percent) were directly associated with ARI and about 1.5 million (14 percent) with diarrhea.

USAID has been a leader in global efforts to control both ARI and diarrheal diseases. The Agency was a major supporter of field-based research that provided the foundation for the current global strategy to reduce ARI deaths, and ARI treatment has since been incorporated into child survival programs in over 70 countries. In the 1960s, USAID supported basic and applied research that led to the development of oral rehydration salts (ORS), a simple and effective remedy to replenish fluids and essential minerals lost through dehydration, and the subsequent introduction of oral rehydration therapy (ORT) in the 1970s. Since then, ORT has become a cornerstone of diarrheal disease control programs worldwide.

The development of the Integrated Management of Childhood Illness (IMCI) strategy in the mid-1990s – principally by WHO, with substantial USAID support – responded to a number of factors that were limiting the effectiveness of ARI, diarrhea, and other disease control programs. IMCI integrates key components of child survival programming, including diarrheal diseases and ARI, as well as approaches to combat malaria and promote breastfeeding, nutrition, micronutrients, and immunization. USAID was a major supporter of the clinical and applied research that underlaid the development of IMCI and has continued to support its expansion globally. Worldwide, as figure 10 on page 38 shows, over 70 countries have begun implementing the strategy in some areas. With WHO, UNICEF, and other partners, USAID has worked to broaden the IMCI agenda and has demonstrated leadership on issues related to drug management and development of IMCI's household and community component, which is essential to provide care for children who never visit a health care facility. USAID has also supported strategic partnerships between IMCI and new initiatives such as Roll Back Malaria.



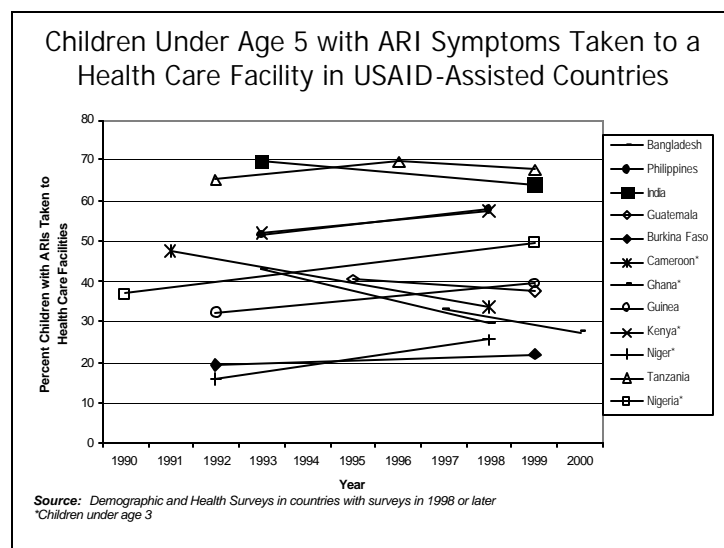
Figure 10



### ***USAID Approach: ARI and Diarrheal Diseases***

**Acute Respiratory Infections (ARI).** USAID provides technical leadership and other support to improve and expand clinic- and community-based treatment of ARI in children. For example, ARI treatment is now available to about 60 percent of the children in Africa, up from about 50 percent in 1990. However, the progress of ARI treatment is variable. Half of the countries shown in figure 11 had increases in the 1990s in the number of children under age 5 with ARI symptoms taken to a health facility or health professional. The other six countries experienced declines.

Figure 11

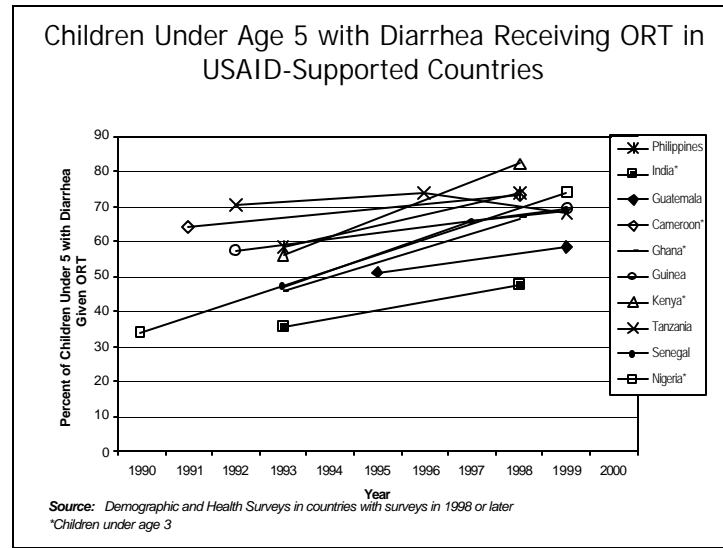


USAID supports improved ARI care by training health service providers and community health workers, designing health education and communication messages, and strengthening supervisory and management systems. USAID is also supporting efforts to prevent the spread of childhood ARI caused or aggravated by poor environmental conditions, including indoor air pollution, and related high-risk behaviors. Other strategies to reduce the threat of ARI to children include:

- working with international partners to develop, evaluate, and introduce new vaccines (including *Haemophilus influenzae* type b vaccine where this infection is a major cause of ARI)
- increasing optimal breastfeeding to reduce ARI in young children
- embarking on studies to test the efficacy of different drug regimens for managing pneumonia in children
- supporting research on the role of zinc in decreasing the incidence and severity of ARI

**Control of Diarrheal Diseases (CDD).** Efforts to control diarrheal diseases over the past decade have included the promotion of ORT in conjunction with key interventions at the facility, community, and household levels. ORT comprises ORS solution, replenishment with other fluids, infant breastfeeding, and supplemental feeding in older children. As seen in figure 12, USAID's efforts to improve diarrheal case management at the clinic and community levels have contributed to steady and significant increases in the use of ORT. USAID promotes the household use of ORT and its institutional use in health care facilities as the best means of preventing child deaths from dehydration. The Agency also plays a leading role in the social marketing of ORS through the commercial sector.

Figure 12



Environmental and behavioral interventions to prevent childhood diarrheal diseases are also an important part of USAID's strategy. These include efforts to improve the quantity and quality of local water supplies and community-based approaches to improve hygienic practices and promote breastfeeding and adequate nutrition.

### ***Key Achievements: ARI and CDD Programs***

**ARI Vaccine Trials.** USAID's targeted investment in ARI vaccine trials is leveraging resources to ensure that children in the developing world benefit from safe and effective vaccines. One promising effort is a pneumococcal (9-valent conjugate) vaccine trial in **the Gambia** that will document the effect of the vaccine in reducing childhood deaths. Another pneumococcal vaccine trial is exploring the potential for vaccinated children to provide herd immunity, i.e., to protect children who have not been immunized. Estimates project that these vaccines, when fully developed, will have the potential to prevent 20 percent or more of all childhood deaths in developing countries.

**Indoor Air Pollution and Pneumonia.** USAID has been working with WHO, private foundations and voluntary organizations, and the research community to address the proven association between smoke from indoor cooking fires and pneumonia in young children. A consultation in May 2000 reaffirmed the significance of this problem in the developing world and the need for an intersectoral approach to address it. While the impacts of various intervention strategies are mostly unknown, commercially viable local solutions, such as improved stoves or fuel, could have significant effects without utilizing health sector resources.

**Hygiene.** Better hand-washing by caretakers and children has been shown to reduce diarrheal disease in young children by at least one-third. USAID is working with

commercial soap producers in Central America and a market research firm to develop and implement a marketing strategy for more effective hand-washing. Initial results after one year are encouraging. In **Guatemala**, the percentage of mothers in lower socioeconomic groups practicing better hand-washing increased from 22 to 32 percent. In addition, the children of these women had an associated 40 percent reduction in the incidence of diarrheal disease.

**Water Chlorination.** In **Zambia**, a home-use, low-level chlorination solution used to treat domestic water supplies has been shown to reduce diarrheal diseases by up to 30 percent. The solution, called Clorin, significantly reduced the incidence of cholera during the 1998-1999 rainy season. Sales of Clorin rose from about 187,000 bottles in 1999 to a greater than expected 428,000 bottles in 2000.

**Reduced Osmolarity ORS.** A multicenter trial led by WHO and funded by USAID evaluated the efficacy and safety of reduced osmolarity (reduced salt content) ORS solution. Researchers found that in children with acute noncholera diarrhea, the use of reduced osmolarity ORS solution was associated with a 40 percent reduction in the need for unscheduled intravenous infusions. A meta-analysis of studies evaluating the efficacy and safety of low-osmolarity ORS solution demonstrated similar results. Based on these findings, WHO is considering a change in its recommendation for the formulation of ORS for children.

**Improved Treatment for ARI and Diarrheal Diseases.** After the breakup of the former Soviet Union, USAID worked with the governments of **Kazakhstan**, **Kyrgyzstan**, and **Uzbekistan** to bring their ARI and CDD treatment protocols into conformity with international standards while also reforming the organization of primary care. Efforts focused on changing national policies, developing training capacity, training physicians in new diagnostic and treatment approaches, and introducing the family group practice model as a more cost-effective approach to providing services. As a result, in the district of Issyk-Kul, Kyrgyzstan, the infant mortality rate declined from 30 deaths per 1,000 live births in 1997 to fewer than 20 in 2000. The model is currently being scaled up in all three countries.

### ***USAID Approach: IMCI***

IMCI was designed to provide a coordinated approach to the growing number of available child survival interventions, the inability of developing-country health systems to support and manage this growing number, and the presence of coexisting multiple conditions in children requiring health services. Since its inception in 1996, 74 countries have adopted the strategy, one-third of them with USAID support.

USAID continues to support the roll-out and implementation of IMCI. As part of this support, USAID promotes high-quality services through improved availability and use of drugs; better monitoring and supervision; and more effective district-level organization and management of child health services. USAID has also taken a leadership role in

improving preventive behaviors, home care, and care-seeking actions at the household and community levels. WHO, UNICEF, the World Bank, and other partners now acknowledge that these systemic and household/community components are integral parts of IMCI.

Political and resource commitments have also increased. In Latin America and the Caribbean, the Pan American Health Organization (PAHO) Directing Council and First Ladies endorsed IMCI, leading to the launch of PAHO's "Goal 2002" initiative. This initiative hopes to prevent an additional 100,000 under-five deaths each year through accelerated implementation of IMCI. Funding for IMCI has been part of World Bank loans to 24 countries, including such important USAID-assisted countries as Bangladesh, India, Indonesia, Egypt, Ethiopia, Mali, Tanzania, Uganda, Bolivia, Brazil, the Dominican Republic, and Peru. The UN Foundation has provided almost \$10 million to four African countries to implement the community component of IMCI.

### ***Key Achievements: IMCI***

**Household/Community Component.** With substantial USAID input, an interagency working group comprising USAID, UNICEF, WHO, the World Bank, the CORE Group of private voluntary organizations, and selected cooperating agencies refined the key behaviors of the household/community component of IMCI. The group is developing a structured approach to introducing and implementing the component in 10 countries.

**Drug Management of Childhood Illness.** In three Latin American/Caribbean countries and two African countries, USAID helped develop and apply a "Drug Management of Childhood Illness" tool to improve the availability and use of IMCI drugs through better drug policies, logistics, and management. USAID has also worked with WHO and the World Bank to develop and field-test an IMCI costing tool to support World Bank development teams and national governments.

**Effectiveness Studies.** USAID efforts to gather evidence of IMCI effectiveness in **Morocco** are helping to further refine and improve the approach. The results of a health facility survey indicate that one year after IMCI training and follow-up, children in IMCI areas were receiving better care than children in comparison areas. While health worker compliance with IMCI guidelines was good with regard to clinical assessment, some important deficiencies were found in areas such as treatment and counseling. Moreover, system-level interventions such as improved drug management were needed for more effective implementation of IMCI.

### ***Future Perspectives***

USAID will direct its future efforts to expanding implementation of IMCI and ensuring that it realizes its potential for improving health outcomes for greater numbers of children. Direct involvement in country and regional programming and working with

partners to increase resources will be part of the Agency's efforts. These efforts will also entail further definition and application of key IMCI elements, including household/community programming, institutionalizing IMCI at the district level in the context of newly decentralizing health systems, and developing new technical refinements such as the use of IMCI in countries with high HIV prevalence. USAID will also continue to assess IMCI's cost-effectiveness and impact.

## **I. Child Survival and Maternal Health**

### **F. Maternal and Neonatal Health**

Results from recent WHO research on maternal mortality are encouraging. New estimates indicate a possible worldwide decline in maternal deaths during the first half of the 1990s. Although assessing the magnitude of the change is difficult because of modifications in research methodology over time, about half of the decline is attributed to a decrease in the number of births each year, with the remainder attributed to reductions in pregnancy-associated risks.

Despite this progress, over 500,000 women around the world still die from complications of pregnancy or childbirth every year, and millions more suffer complications. Virtually all (99 percent) of these largely preventable deaths occur in developing countries. Poor management of pregnancy and childbirth and complications at birth contribute to an estimated additional 8 million stillborn deliveries and newborn deaths each year.

According to the most recent estimates, more than half (over 270,000) of all maternal deaths in 1995 occurred in Africa. Africa also has the highest regional maternal mortality ratio – 1,000 maternal deaths per 100,000 live births each year. Asia (218,000) and Latin America and the Caribbean (22,000) also continue to experience large numbers of maternal deaths annually.

#### ***USAID Approach***

In an effort to reduce maternal death and disability and infant mortality, USAID supports a core set of cost-effective maternal health interventions around the world. These interventions include:

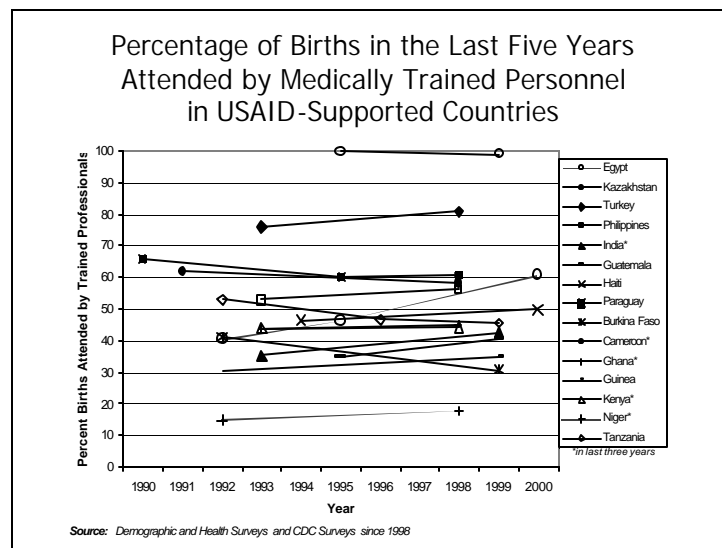
- ***Improving maternal nutritional status.*** Maternal nutritional status at the time of conception and during pregnancy has a major impact on birth outcomes.
- ***Improving preparation for birth, including antenatal care.*** A healthy pregnancy and birth depend upon adequate antenatal care and proper planning for delivery. The latter includes preparing for the possible need for medical assistance or referral.
- ***Promoting safe and clean delivery practices.*** To improve the chances of both mothers and newborns surviving childbirth, improved birthing conditions and increases in deliveries attended by medically trained personnel skilled in midwifery are essential.
- ***Improving postpartum and newborn care.*** Once a baby is born, immediate care with warming, hygiene, early breastfeeding, and other measures greatly enhance the baby's chance for a healthy start in life.

- ***Treating obstetrical and newborn complications.*** Many complications are unpredictable and unavoidable, but prompt care can prevent problems from resulting in death.

Efforts to reduce maternal deaths and disability also address neonatal mortality (death occurring in the first 28 days of life). As declines in preventable childhood diseases occur, neonatal mortality assumes a greater role in overall infant mortality. USAID's maternal health interventions to improve neonatal health include:

- Iron/folate supplementation
- Tetanus toxoid immunization
- Syphilis control
- Presumptive treatment for malaria
- Counseling on safe health practices
- Delivery with a skilled birth attendant
- Early and exclusive breastfeeding

In FY 2000, USAID allocated about \$50 million for maternal health and survival programs.



**Figure 13.** Maternal mortality is difficult and imprecise to measure. However, a good correlation exists between the percentage of births with “skilled attendance” (i.e., births attended by a medically trained person) and the maternal mortality ratio. Therefore, skilled attendance at birth is used as a proxy indicator of maternal mortality. This graph shows trends in deliveries attended by a medically trained person. In most USAID-assisted countries in the Asia/Near East and Latin America/Caribbean regions, this indicator showed modest increases, while in Africa it stagnated or declined.

### **Key Achievements**



USAID has assisted successful projects in support of maternal and neonatal health in many countries. Descriptions of some of these projects follow.

**Indonesia.** In Indonesia, which continues to have high rates of maternal death and maternal anemia, USAID worked with the Ministry of Health to improve the quality of maternity care in South Kalimantan province. USAID provided support for training midwives at the hospital and village levels and technical assistance for social marketing of iron/folate tablets. Services reached approximately 1 million persons. As a result, the percentage of deliveries in the intervention areas managed by a trained midwife rose significantly from 37 percent in 1996 to 58 percent in 1999, and the percentage of pregnant women taking any iron tablets during pregnancy increased from 65 to 73 percent. The Ministry of Health is now committed to sustaining these activities in the program areas and to scaling up the activities to other regions of the country.

**Guatemala.** Poorly equipped facilities and a lack of trained health providers limit the delivery of routine hospital care in Guatemala, especially in rural areas. In addition, poor women are often intimidated by the health services or avoid them because of a lack of cultural understanding on the part of service staff. USAID supported the Ministry of Health in improving essential obstetric care and newborn care services in one-third of the country. Health care providers received training in improved clinical practices, patient counseling skills, and cultural understanding of traditional birthing practices. As a result, use rates for obstetric services increased from 50 to 77 percent in program areas; these increases included substantial gains among undereducated and poor women.

**Bolivia.** In poor and remote areas of Bolivia, limited access to high-quality health services contributes to high maternal and infant mortality. To improve maternal and infant survival, USAID promoted equity and access to health services for all pregnant women and children under age 5 through Bolivia's new national health insurance policy. USAID funds were used to improve the quality of maternal and newborn health services in seven rural and peri-urban areas of Cochabamba and La Paz. Program components, which reached over 650,000 people, included health provider training and multimedia campaigns to promote community demand for and access to quality health services. After two years of support, deliveries in health facilities in the project areas increased from 14 to 24 percent, and the quality of care provided by clinicians who received training improved.

**Nicaragua.** In Nicaragua, USAID is helping introduce quality assurance techniques adapted from the U. S. health system to make better use of limited resources. The program was first implemented in Jinotega and Matagalpa departments, which had maternal mortality ratios more than double the national average. At the beginning of the program, providers were largely unaware of national standards for obstetrical care and met these standards only 3 percent of the time. Ten months after the introduction of quality assurance, providers were meeting care standards 80 percent of the time, and patient satisfaction increased from 58 to 87 percent. Waiting time for pregnancy-related services had been reduced from more than two hours to less than 30 minutes, and detailed medical records were being kept for the first time. In two districts of Jinotega, only three maternal deaths occurred in the first 10 months of 2000, compared with 10 during 1999.

Although it is too soon to be sure if this drop will be sustained, improvements in care have been well established.

**Slovakia.** To address high rates of neonatal death in eastern Slovakia, USAID worked with local hospitals to improve clinical practice in perinatal, neonatal, pediatric, and gynecologic medicine. The activities resulted in improvements in clinical infrastructure, upgrades in nursing practice, and clinical protocols for controlling infection and managing pharmaceuticals. In one hospital, improved management of high-risk pregnancies reduced the perinatal mortality rate from 19 to 5 percent and the neonatal mortality rate from 24 to 7 percent. Expansion of the initiative to other districts is planned.

**Egypt.** Poor quality health services and lack of prenatal care contribute to maternal death and disability in Egypt, where USAID technical and financial assistance supports several initiatives to improve maternal and child health. In 1999, services in 140 neonatal centers in public-sector hospitals were upgraded, and neonatal resuscitation was introduced in obstetric training courses. In 15 districts in Upper Egypt, where maternal mortality is highest, 50 health facilities underwent renovations, and 1,250 health providers received training in essential obstetric care, management, health information, quality assurance, and infection control. As a result, use of antenatal care increased from 28 percent in 1995 to 36 percent in 1999, and the proportion of deliveries assisted by trained providers increased from 46 to 58 percent.

**Angola.** Internal conflict in Angola continues to erode the health care infrastructure and contribute to declining maternal and child health. USAID partners have trained nearly 500 community healthworkers (CHWs) in making home visits to residents and internally displaced persons in Bié, Huila, and Benguela provinces. CHW activities have raised prenatal care coverage in displaced person camps from 29 to 76 percent of all pregnant women, resulting in better hygiene and health care practices. In collaboration with the Ministry of Health, 50 traditional birth attendants were also trained and are working with residents and in the camps.

### ***Future Perspectives***

USAID has provided significant global leadership in maternal and newborn health. Medical interventions and community approaches have both received emphasis in order to ensure maternal health and an optimal start in life for newborns. In the future, USAID will focus research on the effect of micronutrients and infections on pregnancy outcomes. The Agency will also expand support for new cost-effective strategies to deliver well-documented interventions such as tetanus toxoid immunizations (to prevent neonatal tetanus) to vulnerable and hard-to-reach populations.

### ***Presumptive Treatment of STIs in Pregnant Women Reduces Neonatal Deaths***

USAID-sponsored reproductive health research in Uganda provides some encouraging news about increasing a newborn's chances of surviving beyond early infancy. Results of the research confirm that young infants are less likely to die if their mothers are treated for sexually transmitted infections (STIs) during pregnancy.

The research was part of a large study conducted in Rakai, a rural community in southwestern Uganda, where a large population of male and female study participants received treatment for STIs, whether they had been diagnosed with an STI or not. Pregnant women who received this population-based "presumptive" treatment were monitored, and their maternal and child health outcomes were compared with women who were not part of the mass treatment regimen. In addition to finding a reduced incidence of neonatal death for infants whose mothers received presumptive treatment, researchers found that these infants had a reduced likelihood of congenital eye diseases associated with STIs and were less likely to be born preterm or underweight at birth.

STIs have long been known to cause complications during pregnancy and delivery as well as miscarriages and stillbirths. Untreated STIs increase the risk of infant death and disability and lead to low birthweight, premature birth, congenital syphilis, and ophthalmia neonatorum, which causes blindness. STIs may also increase maternal-to-child transmission of HIV/AIDS resulting from placental membrane inflammation. The results of this research provide new insights into effective preventive care of women during pregnancy that can improve the health and well-being of both mothers and infants.

## **I. Child Survival and Maternal Health**

### **G. Health Policy and Systems Strengthening**

USAID strives to employ child survival technologies to the maximum effect. For this to occur, health systems must function efficiently, and supportive, enabling policies must be in place. Improvements in transport and logistics systems, training, communications, financing mechanisms, disease surveillance, and health information systems are critical to more effective delivery of child survival interventions. Without these improvements, systems cannot reach all populations, particularly those most in need.

### **USAID Approach**

USAID takes a four-pronged approach to strengthening the health policies and systems of developing countries. The Agency's goals in this regard are to:

- Make financing systems more efficient
- Develop and implement human resources systems for improved planning, management, and staff training
- Improve drug and commodity availability through rational drug use policies and appropriate selection, quantification, procurement, and distribution processes
- Improve information management through improved data collection, use, and quality

### ***Key Achievements***

**Health Care Reform and Financing.** USAID provided technical guidance to introduce primary health care practices (PHCPs) in the **Kyrgyz Republic**. About half of the 390 PHCPs were financed under a per capita payment system designed with USAID assistance. Reforms led to a more cost-effective health care system, freeing scarce health care resources for the most pressing public health concerns. PHCPs now serve the entire populations of several major urban centers and about half the national population. The majority of those enrolled in a PHCP in pilot sites were able to choose their own provider.

**Insurance Systems and Financing.** Between 1998 and 1999, the number of health care providers in two districts in **Kazakhstan** who were reimbursed by new payment systems increased from 134 to 342. Providers included PHCPs, hospitals, and polyclinics. The number of newly restructured PHCPs tripled in these districts, increasing the number of families with access to care. In the three largest cities of these districts, PHCPs now cover 85 percent of the population. In many areas, new practices also offered expanded services.

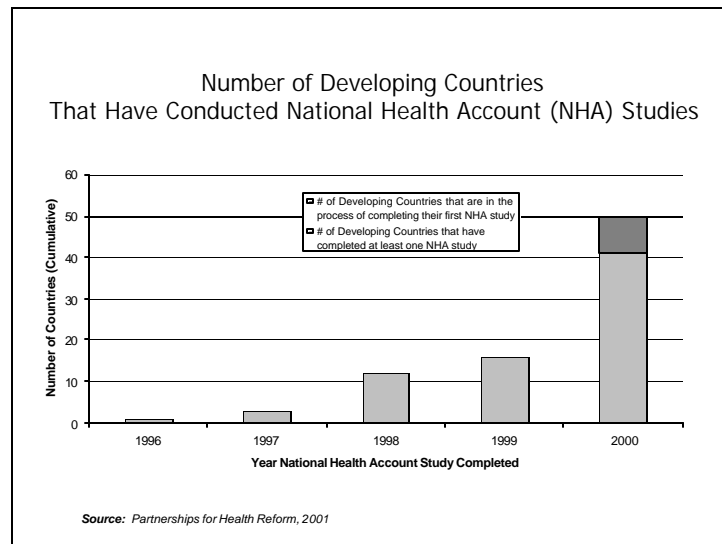
**Primary Care Prepayment.** Within one year of the introduction of a pilot scheme for prepayment of health care fees in Rwanda, 90,000 people in three districts enrolled and paid membership fees. In 2000, the rate of attended deliveries in two districts increased by 45 percent, utilization of prenatal services increased by 25 percent, and vaccinations increased by 50 percent. USAID is providing technical assistance to Rwanda's Ministry of Health to expand the program nationwide.

**Quality of Care.** In **Rwanda**, USAID support has improved the organizational approach to service quality at the Central Kigali Hospital and smaller health centers. Plans are underway to institutionalize this quality improvement program and apply it to other health centers and hospitals in Rwanda.

**Drug and Commodity Availability.** With USAID's support, more than 400 communities in **Malawi** are administering drug-revolving funds that assure an immediate supply of malaria medications and oral rehydration salts to children in rural villages. Between 1998 and 1999, USAID technical assistance and logistical support in **South Africa** resulted in significant increases in the availability of seven essential drugs.

**Better Information with National Health Accounts (NHAs).** In 2000, WHO was able for the first time to make worldwide comparisons of national spending on health and compare public, private, and out-of-pocket shares of health spending by country. This was largely due to USAID's work over the past three years to introduce national health accounts in developing countries (figure 14). Almost half of the 50 countries that now have NHAs developed them with USAID support. The governments of **Guatemala** and **Ecuador** are beginning to use NHA information to track national health care spending and reform national health legislation.

Figure 14



**Public-Private Partnerships.** With USAID support, about 3.5 million people in **Guatemala** who did not have access to health care services in 1996 now receive services through a public-private partnership between the Ministry of Health and nongovernmental organizations (NGOs). The Ministry regulates the system and provides financial resources and supplies, and the NGOs provide the human resources and local expertise. In **Egypt**, the Family Health Fund, designed with USAID support, contracts with public and private providers, who deliver an integrated benefit package of basic services, including maternal and child health, to 40,000 families. All facilities contracting with the fund must meet new accreditation standards developed with USAID assistance. Monthly payments to providers are based on a productivity incentive plan. Productivity increased fivefold in the fund's first year of operation.

**Information Technology.** A small but high-impact USAID activity in **Ukraine** has established 12 learning resource centers that provide Internet links to online medical sites. The connection to worldwide medical literature opens up new avenues of communication and information.

**Cost Containment.** The Ministry of Health in **Romania** is implementing a USAID-funded hospital cost-containment model nationwide. The model promotes efficient management of hospital resources based on the diagnostic-related groups system.

**Information.** USAID supports Demographic and Health Surveys (DHS) in order to obtain the most up-to-date information on a large number of child survival indicators and related information. In 2000, surveys were conducted in 27 countries. DHS data are invaluable for assessing progress in child survival, determining program performance, formulating policy, and developing programs. In addition, special studies and comparative analytical reports in such areas as nutrition charting and pregnancy management and outcomes were conducted in 11 countries.

### ***Future Perspectives***

With international organizations and other donors, USAID is providing technical leadership on a range of new health sector issues. For example, USAID works with international organizations and other donors in the design of national debt relief and poverty reduction strategies, advocating that programs that strengthen health systems and priority health initiatives such as immunizations be included. In addition, USAID is helping to seek solutions that will mitigate the devastating impact of HIV/AIDS on the health care work forces of countries heavily affected by the epidemic. USAID's continued strong involvement in health sector reform will help ensure that investments in health interventions have maximum benefits and are sustainable.

## **II. Vulnerable Children**

### **A. Displaced Children and Orphans Fund**

Since 1989, USAID's Displaced Children and Orphans Fund (DCOF) has been addressing the problems of children living without parental support or protection. Most of these children have been affected by war or HIV/AIDS. In the 12 years since its inception, DCOF assistance has contributed more than \$99 million to the programs of nongovernmental organizations (NGOs) in 30 countries. In addition to direct service, the DCOF promotes local capacity building to ensure sustainable approaches for the care and protection of these children.

#### ***USAID Approach***

DCOF-supported activities assist children affected by war, children affected by HIV/AIDS, street children, and children with disabilities.

**Children Affected by War.** The largest percentage of DCOF funds goes to assist children affected by war, who today can be found in more than 50 countries around the world. It is estimated that there are more than 300,000 child combatants engaged in wars and over 400,000 unaccompanied refugees or internally displaced children also suffering the effects of armed conflict. Involuntary participants in war and victims of its violence and trauma are not the only children affected, however. For each child killed or injured by violence, gunfire, or land mines, many more are deprived of basic physical, emotional, spiritual, and cultural needs. Essentially, all children living in conflict areas suffer from varying degrees of anxiety and emotional distress, which, if not effectively addressed, can adversely affect them for the rest of their lives. Sexual exploitation and abuse especially victimizes girls, often with lifelong impacts.

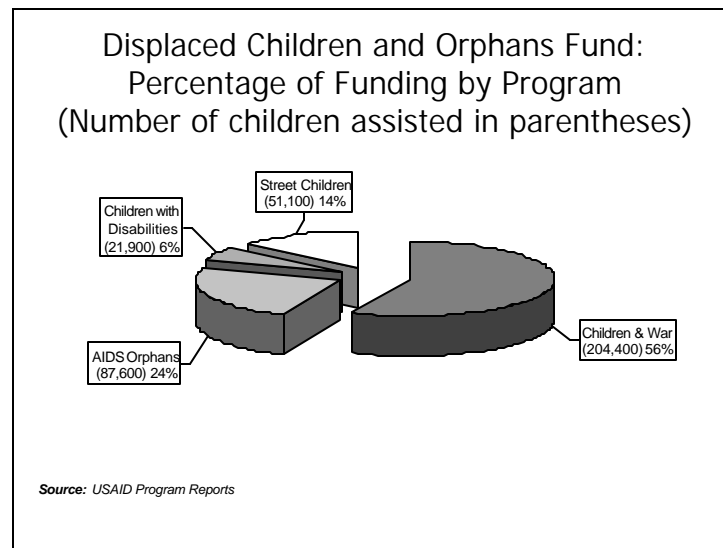
**Children Affected by HIV/AIDS.** Children orphaned by HIV/AIDS have become one of the largest and most at-risk groups of children, especially in sub-Saharan Africa. DCOF assistance strengthens family and community safety nets in support of these children, whose large and growing population will outstrip the available resources for providing direct services. Beginning in FY 2001, most of USAID's assistance to children made vulnerable by HIV/AIDS will be supported under a new program described in section IIB of this report.

**Street Children.** Street children are another population of vulnerable children for whom targeted programming can make a difference. An estimated 100 million children work or live on the streets of both the developed and developing worlds. Many of these children end up homeless as a result of social and financial distress in their families. Many others are innocent victims of national economic collapse or political upheavals and transitions. DCOF strategies for addressing the needs of street children stress the importance of family- and community-based care and protection as the first line of defense.

**Children with Disabilities.** In FY 1999, DCOF-supported assistance began to address a new group of vulnerable children – children with disabilities. Stigmatized by cultural values or religious beliefs, many children with disabilities are hidden in back rooms or permanently placed in government institutions away from communities and society. DCOF supports community-based approaches to provide disabled children with care and training in life skills.

Approximately 365,000 children benefited from DCOF support last year. Figure 15 shows the proportion of funding by program and the numbers of children assisted.

Figure 15



### ***Key Achievements***

Some highlights of the past year include:

- In **Sierra Leone**, demobilized children are being registered and identified for reunification with families and communities. Follow-up visits from counselors assist reunified children. Youth clubs are being established, and recreational materials have benefited over 10,000 children. Child-mothers and other girls who have been sexually abused also benefit from DCOF assistance.
- In northern **Uganda**, over 1,500 children abducted by the Lord's Resistance Army are being helped to return home, enroll in school, and reintegrate into their communities as quickly as possible.
- In **Kosovo**, USAID works with thousands of young people to help identify and address their problems. This initiative has established tutoring and mentoring



programs, set up soccer leagues and other recreational activities, and launched service projects, including the construction of two youth centers in under-served regions.

- In **Rwanda**, estimates suggest that up to 70 percent of the children in government centers remain in them for economic and social reasons. DCOF-supported activities are enabling many families who once refused to accept their sons and daughters to seek their return. Five orphanages have requested DCOF assistance in placing children.
- In **Ethiopia**, an institution that formerly was home to 1,000 orphans was able to place 900 of them into other types of care through an orphan-support program managed by members of the community. Only 100 very young children remain in the institution's care.
- In **Peru**, a DCOF-supported program almost achieved its three-year goal in its first year by helping 1,163 street children enroll in primary and secondary schools. The program also enrolled 404 students in a vocational training program.
- Ongoing reform efforts in **Romania** have resulted in a reorganization of the National Department for the Protection of Children. As part of this reorganization, 60,000 children are being transferred from centralized institutions for the handicapped to local county authorities. Children with special needs and their families will now be supported by their local communities and community-based service systems.

### ***Future Perspectives***

Eritrea, Ethiopia, Kosovo, Sierra Leone, Sri Lanka, and Uganda are all areas where DCOF funds are supporting interventions that reach vast numbers of war-affected children. With DCOF support, NGOs have reunited children with their families, provided counseling, established alternatives to institutional care, and bolstered community capacity to address these children's needs. In the coming year, USAID will expand and broaden these efforts. Globally, USAID will continue to encourage national governments to establish policies that promote the care of orphaned children within communities instead of institutions.

## II. Vulnerable Children

### B. Assistance to Orphans and Other Children Made Vulnerable by HIV/AIDS

HIV/AIDS is undermining the safety and well-being of children in unprecedented ways on a staggering scale. Globally, AIDS has caused the death of the mother or both parents of an estimated 13.2 million children. Yet these children represent only a portion of those made vulnerable by the epidemic. Many more have lost a father to AIDS; others are living with and caring for a parent who is ill; and still others live in households where already inadequate resources are further stretched by caring for orphans and sick relatives. The number of children in need is vast and will continue to increase for decades. The United States is poised to play a leading role in responding to this massive, quickly evolving disaster.

Most children affected by HIV/AIDS are being cared for in communities by relatives and neighbors. Communities have mobilized to identify and provide collective support for those most in need, but the ability of communities to care for the growing numbers of vulnerable children is increasingly strained. The foundation of an effective response must be to strengthen the capacity of families and communities to enable them to continue to provide care within the community.

USAID now funds activities to reach children affected by HIV/AIDS in 18 countries. Most of these activities have only begun in the last two years, and some are still in development. Beginning in FY 2001, new planned funding will enable USAID to expand the coverage and quality of efforts focusing on children and their families through:

- **Support for community activities.** USAID will support efforts by communities to mobilize to identify the most vulnerable children and adolescents and then address their needs. This support will include material assistance such as food, school fees, shelter, clothing, and blankets; economic-strengthening activities, including credit and savings programs; counseling and ongoing emotional support; peer support and guidance provided by older children to younger children; helping parents plan their children's future care; protection from abuse; and interventions to address the stigma often directed at people living with HIV/AIDS and their families.
- **Identification of effective, efficient, sustainable programs and sharing lessons learned.** Governments, donors, NGOs, and community groups need better information about the most effective ways to intervene and how to achieve coverage that addresses the massive scale of need. "Lessons learned" must be shared with local and global partners.
- **Capacity building for designing and implementing programs and sustaining effective efforts.** USAID will expand programs to enhance national and local capacity, supporting activities such as local training, workshops, information-sharing networks, and cross-site visits.

- **Aid to governments in assessing their role in caring for these children and in developing and implementing responses.** USAID will support efforts that enhance the ability of governments to protect the most vulnerable children and provide essential services. These include activities to build political will; enhance strategic planning; refine policies, regulations, and laws; and strengthen safety nets for children affected by HIV/AIDS and their families.

As this new program scales up, USAID will help create and support coalitions of governments, international organizations, NGOs, community-based organizations, faith-based organizations, foundations, and the private sector to respond to the growing numbers of children affected by HIV/AIDS.

### III. HIV/AIDS

In December 2000, the United Nations Joint Programme on HIV/AIDS (UNAIDS) estimated that 36.1 million people throughout the world are living with HIV/AIDS. More than 5 million new HIV infections occur each year. Most new infections occur in the developing world, and 95 percent of the world's infected people live in developing countries.

In the most seriously affected countries, the HIV/AIDS epidemic has reduced productivity and per capita gross domestic product, contributed to rising infant mortality and falling life expectancy, and has imposed an enormous human and financial burden on health care systems. At the same time, the epidemic is more than just a problem of the affected nations, because it does not remain within the confines of national borders. Addressing HIV/AIDS requires close attention to the movements of people between regions, within subregions, and across borders.

#### Regional Variations

**Sub-Saharan Africa** is the home of 70 percent of the world's HIV-infected people and of 90 percent of the world's AIDS orphans. HIV/AIDS has reached "full-scale" epidemic level (i.e., prevalence of 1 percent or more among adults 15 to 49 years old) in 37 African countries. In 16 countries, more than one in 10 adults, or 10 percent, are HIV-positive.

In comparison with Africa, rates of HIV infection in the general populations of **Asia** are low. Prevalence among 15- to 49-year-olds exceeds 1 percent in only three Asian countries – Cambodia, Myanmar, and Thailand. However, in the huge populations of India and China, even low prevalence can still translate into very large HIV-infected populations. Indeed, more than 3.7 million people in India were living with the virus at the beginning of 2000 – more than in any other country except South Africa. By 2010, Asia is projected to have more HIV-positive people than any other region.

While HIV prevalence in Europe and Eurasia is lower than in other regions, UNAIDS reports that in 1999 **Eastern Europe** and **Central Asia** had the world's fastest rate of increase in new HIV infections. At the end of 1999, UNAIDS estimated that more than 420,000 people in the region were HIV-positive, with injectable drug use the major mode of transmission. In the Russian Federation, more than three times as many new cases were reported in 1999 than in all previous years combined after an outbreak of HIV occurred among injectable drug users in Moscow.

In **Latin America** and **the Caribbean**, two distinct epidemics have taken shape, one in the island and coastal Caribbean countries and one in the mainland South American countries. In general, the countries with the highest prevalence rates are on the Caribbean side of the continent – in Guyana, for example, more than 7 percent of pregnant women in urban areas tested positive for HIV in 1996. The Caribbean subregion itself has the highest incidence of HIV outside of sub-Saharan Africa.

## Mother-to-Child Transmission

Infants and children in developing countries are directly affected by HIV/AIDS through mother-to-child transmission (MTCT). These children face severe morbidity and a high probability of death before age 2. An alarming number of infants in developing countries have already contracted HIV/AIDS from their HIV-infected mothers through MTCT. Estimates of the number of infants and children who had died from AIDS by the end of 1999 range from 330,000 to 650,000. Ninety percent of these deaths occurred in Africa.

The best way to avoid MTCT is to prevent women of reproductive age from becoming infected with HIV. However, for the millions of women around the world who are already infected and for those who will become infected in the future, direct interventions are available to help protect their infants. These include comprehensive antenatal services, voluntary counseling and testing, support for safe infant feeding practices, family planning, safe motherhood practice, and (where available) short-course antiretroviral drugs for HIV/AIDS.

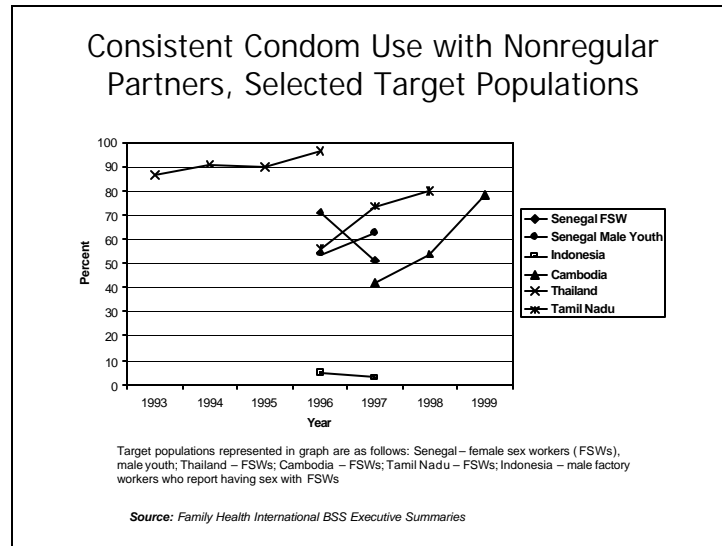
## Measuring Trends

Although there are complex technical and ethical issues that make it difficult to measure HIV prevalence in the general population, this represents the most critical indicator of impact. In addition, USAID uses proxy indicators such as behavioral change and condom sales to monitor program performance. The most important of these indicators is an increase in condom use in casual sexual relationships. To measure and track this and other behavioral changes, USAID has supported Behavior Surveillance Surveys (BSS) in more than 20 countries since 1992. These surveys are monitoring and evaluation tools systematically and repeatedly applied through cross-sectional surveys designed to track trends in HIV/AIDS-related knowledge, attitudes, and behaviors in subpopulations at particular risk of HIV infection. BSS findings provide evidence of project impact, highlight persistent problem areas, identify appropriate target populations for interventions, function as policy and advocacy tools, and supply comparative data concerning behavioral risks.

BSS findings have provided invaluable understanding of HIV behavioral trends and the impact of USAID and other donor programs. As figure 16 shows, trends can vary among countries, target populations, and behaviors. In **Thailand**, for example, men reported a significant decline in patronage of commercial sex between 1993 and 1996, while the consistent use of condoms by prostitutes/female sex workers (FSWs) increased. Increases in consistent use of condoms by FSWs have also occurred in **Cambodia** and **India**. In contrast, data from **Indonesia** indicate a low usage of condoms with nonregular partners. Consistent condom usage also declined from 5 to 3.3 percent between 1996 and 1997 among male factory workers who have sex with FSWs. Although a few groups of FSWs increased consistent condom use in various port cities of Indonesia, other groups

reported a decrease in condom use. Decreases in condom use with nonregular clients also occurred among FSWs in **Senegal** (71.2 to 51.4 percent), although male youths reported increased condom use with nonregular partners (54.3 to 63.6 percent).

Figure 16



### ***USAID Approach***

USAID’s objectives are to reduce HIV transmission in developing countries and to reduce the impact of the HIV/AIDS pandemic on them. The Agency focuses its efforts on:

- Increasing the quality of, availability of, and demand for information and services to change sexual risk behaviors and cultural norms to reduce HIV transmission
- Enhancing the quality of, availability of, and demand for services for managing and preventing sexually transmitted infections (STIs)
- Increasing the participation of the NGO community in programs to prevent HIV transmission and support persons with HIV/AIDS and their caregivers, families, and survivors
- Improving the quality, availability, and use of evaluation and surveillance information
- Developing, testing, and promoting HIV/AIDS prevention and care interventions

In addition to promoting prevention efforts, USAID strives to mitigate the effect of the pandemic on individual lives and communities. Working with faith-based organizations and other private or community groups, USAID supports selected basic care and psychosocial services for HIV-infected individuals and their families. This support will enhance the prevention agenda and slow the deterioration of economic and social

development. USAID also assists orphans and other children made vulnerable by HIV/AIDS, as described in chapter IIB of this report.

An important dimension of USAID's approach is its emphasis on measuring results. USAID supports the U.S. Census Bureau's initiative to update the HIV/AIDS International Surveillance Database, a unique resource used by international partners to track the HIV/AIDS pandemic and the impact of interventions. USAID's global leadership in operations research bolsters its prevention and mitigation strategies, enabling it to provide assistance and support for state-of-the-art, cost-effective services that directly reach individuals and communities.

### ***Key Achievements***

With its strong field presence, technical leadership, level of financial support, and extensive, long-term relationships with host country institutions, USAID has become one of the global leaders in the international fight against HIV/AIDS. The Agency supports prevention and care programs in 48 countries and has five regional programs. These national and regional programs have already helped alter the course of the HIV/AIDS epidemic in a number of countries.

Some examples of USAID programs and the Agency's involvement in collaborative and partnership activities follow.

### **Comprehensive National Programs**

**Zambia.** USAID is the largest donor to Zambia's national HIV/AIDS control program. To influence changes in behavior, USAID has supported a comprehensive education program that targets young adults using mass media, print media, and interpersonal communications. It has included an innovative "info-tainment" program developed through Africa Alive, a Zambian NGO, which has produced compact discs and sponsored concerts featuring music with HIV/AIDS prevention messages appealing to Zambian youth. Complementing this has been *Trend Setter*, a newspaper designed, produced, and published by and for Zambian youth. The newspaper contains HIV/AIDS prevention messages, and more than 100,000 copies have been distributed. USAID also supports a condom social marketing program, which achieved a 55 percent increase in condom distribution (from 5.3 million to 8.3 million) over the past two years. Subsequent to these efforts, a Sexual Behavioral Condom Use Survey showed a significant increase from 36 percent to 48 percent of young people reporting condom use with regular sex partners, and a significant decline from 17 to 11 percent between 1996 and 1999 in the percentage of young people who report engaging in casual sex. More importantly, recent surveys show a 42 percent reduction in prevalence rates (from 28 to 15 percent) for the 15- to 19-year-old age group in Lusaka and other urban areas between 1994 and 1998.

**Uganda.** Uganda has become a model for curbing the HIV epidemic in developing countries. USAID-supported HIV/AIDS activities in Uganda include upgrading the skills of health care providers in preventing and treating STIs and in HIV testing and counseling. USAID has supported activities such as condom social marketing, voluntary counseling and testing, a mass media public awareness campaign, and a comprehensive community health education program. As a result, USAID efforts have contributed to significant increases in condom use, a decline in infection rates among 15- to 19-year-old girls from 22 percent in the early 1990s to 8 percent by 1998, and a reduction of national HIV/AIDS prevalence from about 14 percent in the early 1990s to 8.3 percent at the end of 1999.

**Senegal.** A success story in HIV prevention, Senegal has maintained one of the lowest HIV prevalence rates in sub-Saharan Africa. Prevalence has risen only slightly, from 1.2 percent of the population in 1995 to 1.8 percent at the end of 1999. USAID has been instrumental in helping the Government contain the spread of HIV/AIDS through a combination of early and aggressive control efforts, which have included intensive information campaigns to promote condom use by young adults; an effective epidemiologic surveillance system for high-risk groups; and the involvement of religious, political, and traditional leaders. USAID also works with the Ministry of Health to integrate STI control into maternal/child health and family planning programs.

### **Condom Promotion, Behavior Change, and Social Marketing**

In 1997, USAID launched a condom social marketing program to help prevent HIV/AIDS transmission and increase demand for condoms, especially in high-risk populations. In 2000, USAID-supported projects sold over 210 million condoms in 20 country programs, a 16 percent increase over 1999. In an effort to increase use of barrier methods of protection by offering more options, USAID also has introduced the female condom into social marketing programs in 13 countries. In 1999, USAID-supported programs sold more than 870,000 female condoms, an 8 percent increase over the previous year.

In **Brazil**, a four-year project in four target states has had particular success in expanding the availability of both male and female condoms to high-risk populations. In 1999, the project sold 42 million condoms, a 24 percent increase over 1997 sales. From January to September 2000, sales of male condoms further increased to over 50 million, and more than 600,000 female condoms were sold, a 104 percent increase over 1999.

In **India**, USAID-funded HIV/AIDS prevention activities began in the state of Tamil Nadu in 1996. By the end of 1998, high-risk groups served by the program achieved significant, sustained changes in their sexual behavior and demonstrated significantly increased condom use among FSWs and their clients. For example, consistent condom use with nonregular sex partners increased from 56 to 80 percent among FSWs, and use by male factory workers increased from 17 to 50 percent.



## STI Management Programs

Many STIs increase the risk of contracting HIV infection. For this reason, USAID supports improved, expanded STI control programs in 16 countries. Assistance ranges from developing more effective national guidelines for diagnosing and treating STIs to training health workers to increasing demand for services among vulnerable groups. For example:

- In a mining community in **South Africa**, 25 percent of the women had one or more STIs. USAID supported an intervention to reduce the prevalence of curable STIs by providing STI treatment services and prevention education to a group of high-risk women living in areas around the mines. Reported condom use with casual partners among the women increased significantly from 2 percent at the first clinic visit to 7.4 percent, 27.6 percent, and 33.3 percent at the second, third, and fourth visits, respectively. The rate of all STIs measured at follow-up visits were significantly lower – 12.3 percent, 10.6 percent, and 5.7 percent at the second, third, and fourth visits, respectively. Among male miners examined before the intervention and nine months later, the prevalence of gonorrhea and/or chlamydia decreased from 10.9 to 6.2 percent.
- In **Ghana**, USAID has been working with the government to educate members of the army, the national police, and the general population in HIV/STI prevention and to improve STI control services. In 10 public health regions, 502 health care workers have been trained in STI syndromic management. In the police services, 12 health care providers have been trained in STI syndromic management, and 65 police personnel around the country have become peer educators. An HIV/STI unit has been established at the Police Hospital. In addition, 90 military personnel and service providers were trained as peer educators. They also sold condoms to enhance STI treatment programs with an HIV/STI prevention component.
- During the first six months of FY 1999, infectious syphilis cases in **Jamaica** were reduced by 40 percent through expanded prevention and treatment programs. The programs focused on the high-risk group of STI clinic attendees. Beginning in 1990, routine HIV testing among such sentinel groups in three parishes had tracked increases in HIV seroprevalence from 3.1 percent in 1990 to 7.1 percent in 1998. In 1999, however, seroprevalence remained at the 1998 level.

## Care and Support Services

USAID is also funding programs that offer HIV/AIDS care and support services to individuals, families, and communities in 22 countries. These services include the protection of human rights, access to voluntary counseling and testing (VCT), psychosocial support, basic medical and palliative care, treatment and prevention of opportunistic infections (especially tuberculosis), community-based economic support, and support for children affected by AIDS. VCT centers in **Malawi** and **Zimbabwe** are examples of these services. In Malawi, a VCT center served 5,663 clients in 1999, a 62

percent increase over 1998. In Zimbabwe, the first of six new VCT centers opened in September 1999; by December, more than 2000 clients had used the services.

### **Mother-to-Child Transmission (MTCT)**

USAID has been a leader in carrying out research on MTCT, sharing its results, and sponsoring pilot programs. This work is critical to determine the magnitude of the problem and the safety, efficacy, cost, and feasibility of various MTCT interventions in developing world settings, as in the following examples from Africa:

- UNAIDS estimates that more than 1 million women between 15 and 49 years old and about 78,000 children under age 15 were living with HIV/AIDS in **Kenya** in 1999. Along with the Kenya Ministry of Health, UNICEF, UNAIDS, and WHO, USAID is supporting an MTCT prevention project in three sites. Using African researchers, the project looks at the use and cost-effectiveness of a comprehensive package of MTCT interventions. The services include voluntary counseling and testing, antiretroviral drugs, and counseling about infant feeding and formula. By the end of 2001, the study will provide much needed information on the impact of MTCT interventions on child survival, the incidence of HIV, and the quality of life for mothers and their children.
- In **Zambia**, approximately 25,000 infants become infected each year. As part of a national effort to address MTCT, USAID has supported MTCT prevention projects since 1997. These projects have successfully integrated counseling on infant feeding, maternal nutrition, and HIV voluntary counseling and testing into health facilities and community services. This approach to MTCT will soon be adapted to or replicated in other parts of Zambia and the region.

### **Donor Collaboration and Partner Development**

Nowhere is USAID's impact on the international donor community more visible than in the global crusade against AIDS. USAID is the major contributor to UNAIDS and has collaborated with UNAIDS and WHO on the first set of comprehensive guidelines to monitor and evaluate national HIV/AIDS/STI prevention and control programs. These guidelines were introduced at the International HIV/AIDS Conference in South Africa in July 2000 and have quickly become the world- wide standard for monitoring and evaluating national programs. USAID is also one of the primary sponsors of the International Partnership Against AIDS in Africa (IPAA), a UNAIDS initiative to promote and coordinate an expanded public/private partnership in support of HIV/AIDS prevention and assistance for those living with HIV/AIDS in sub-Saharan Africa.

U. S. Government collaboration to address HIV/AIDS internationally is becoming a model for intragovernmental efforts. The FY 2000 Leadership and Investment in Fighting an Epidemic (LIFE) initiative involves unprecedented collaboration among

USAID, the U. S. Department of Health and Human Services, and the U. S. Department of Defense. USAID has the lead role in facilitating coordinated action. The initiative links with the goals and objectives established by the international community in collaboration with UNAIDS. In FY 2001, the U. S. Government's expanded response to the international HIV/AIDS situation will also include the U. S. Department of Labor.

### ***Future Perspectives***

With increased funding in FY 2001, USAID will implement an "expanded response" to the global HIV/AIDS pandemic. USAID is committed to enhancing the capacity of countries to protect their populations not yet infected by HIV and to providing services to those infected with HIV and others affected by the epidemic. Given the pace and span of the pandemic, it is clear that the response cannot be "business as usual." The global USAID response should be broad in *scope*, i.e., multisectoral, and *coverage*, i.e., in high- and low-prevalence countries, in order to make a sustained, cost-effective difference. Toward this end, USAID will strengthen its financial and technical support to countries to:

- ***Prevent the transmission of HIV***, with a dual emphasis on high-prevalence countries and low-prevalence countries that are deemed at risk
- ***Build the capacity to provide care and support*** for as many affected individuals, families, and communities as possible, particularly in those countries most severely affected
- ***Reduce significantly social and economic impacts*** of the epidemic on vulnerable groups, particularly within key sectors of health, education, and democracy and governance
- ***Develop and introduce new approaches and technologies*** to HIV/AIDS prevention and care, including a female-controlled microbicide, more effective behavior change models for men, rapid STI and HIV diagnostic tests applicable for low-resource settings, and preventive and therapeutic vaccines

These activities will be accompanied by increased surveillance of the epidemic. In collaboration with CDC, WHO, and UNAIDS, HIV sentinel surveillance systems will be improved in selected countries to report annually on HIV prevalence among 15- to 24-year-olds. Beginning in 2001, USAID, with its partners, will begin periodic national surveys to collect information on changes in reported sexual behavior and to measure the quality and coverage of care and support services specified under this initiative.

#### **IV. Infectious Disease Initiative**

WHO estimates that more than 13 million people die every year from infectious diseases. USAID addresses acute respiratory infections and diarrheal diseases (infectious diseases that are both major causes of death) as part of its comprehensive Child Survival and Maternal Health Program. USAID's immunization programs also prevent death from infectious diseases. Through its more recent Infectious Disease Initiative, USAID addresses the problems of resurgent tuberculosis, the spread of malaria, increased prevalence of antimicrobial resistance, and weak surveillance and response systems, all of which threaten human health.

##### ***USAID Approach***

The Infectious Disease Initiative, launched in 1998 with the support of the U. S. Congress and in collaboration with CDC, WHO, UNICEF, nongovernmental organizations, and other international partners, attempts to develop strategies and interventions in four program areas:

- Improving tuberculosis prevention, control, and treatment
- Improving malaria prevention, control, and treatment
- Reducing antimicrobial resistance
- Improving local capacity for surveillance and response

In each of these areas, the Initiative emphasizes approaches that can be applied on a national scale with in-country resources.

##### **Tuberculosis**

Ninety-five percent of all TB cases and 98 percent of all TB deaths occur in developing countries. TB is the leading cause of death among people infected with HIV. It accounts for one-third of AIDS deaths worldwide, and the HIV/AIDS pandemic is helping to fuel its spread.

In FY 2000, USAID committed an estimated \$20 million for TB programs. Currently, the Agency's efforts focus on strengthening TB surveillance, developing new TB diagnostics, and conducting operations research to address multidrug-resistant (MDR) TB and improved drug regimens. In addition, USAID provides support for the Stop TB Initiative, a global partnership coordinated by WHO to ensure that TB patients, especially those in vulnerable populations, have access to treatment. USAID also supports accelerated implementation of the Directly Observed Treatment Short Course (DOTS) therapy, an effective, affordable strategy for controlling TB. DOTS has an average

success rate (cure and completion of treatment) of 80 percent and is especially valuable in resource-poor settings. In addition, USAID continues to develop cost-effective approaches for the surveillance and treatment of MDR TB in Europe and Eurasia. Presently, USAID is supporting TB control in 10 countries.

USAID's TB strategy focuses on:

- Expanding programs in countries with the greatest TB burden, high HIV/AIDS prevalence, and epidemics of MDR TB
- Continuing investments in global and regional partnerships, including expanded research efforts
- Expanding the cadre of TB experts in collaboration with CDC, the U. S. National Institutes of Health, WHO, and nongovernmental organizations

### ***Key Achievements in Tuberculosis***

- In **El Salvador**, USAID helped 59 Ministry of Health laboratories obtain better diagnostic equipment and improve the supervisory and technical skills of laboratory personnel. As a result, more cases were diagnosed and follow-up treatments increased from 66 percent of patients in 1998 to 84 percent in 2000.
- USAID collaborated with the Government of **Kazakhstan** in 1998 to develop the first policy on TB treatment in the Eurasia region consistent with the DOTS approach. The Government initiated DOTS in 21 sites nationwide, and by 1999 14 of these sites had achieved cures in 75 percent or more of their TB patients. USAID's support of the national TB program has contributed to a 20 percent decline in mortality, from 38.4 to 30.7 deaths per 100,000 population.
- In 1998 in **Russia**, USAID, CDC, the Scientific Research Tuberculosis Institute of the Russian Academy of Medical Sciences, and the Ministry of Health developed a multiyear TB prevention and control program to implement in the general populations of selected districts. USAID trained TB professionals from the Institute, the Ministry, and four districts in both the U.S. and Russia. With USAID assistance, the Institute's Scientific Board developed a protocol on TB treatment that helped improve diagnostics, treatment, surveillance, and case management practices. USAID will further strengthen this program by improving data collection and surveillance systems, helping to develop public awareness and education programs, and providing social support to TB patients and their families.

## **Malaria**

Malaria affects 300 million to 500 million people annually. Approximately 2 million deaths worldwide can be attributed to malaria each year, with 1 million of those deaths occurring in children under 5 years of age. To lead the global effort to control malaria and strengthen health care services for malaria-endemic populations, UNICEF, UNDP, the World Bank, and WHO jointly launched the Roll Back Malaria (RBM) Initiative on October 30, 1998. USAID works to develop links between RBM and maternal/child health programs and to foster innovative strategies for preventing malaria transmission. USAID also supports research on social, economic, and biomedical factors that affect the impact of malaria and the development of prevention technologies such as malaria vaccines.

USAID's malaria strategy focuses on:

- Preventing malaria infection and illness
- Promoting early and effective diagnosis and treatment
- Promoting intermittent, presumptive treatment for pregnant women
- Responding to malaria in countries experiencing complex emergencies

### ***Key Achievements in Malaria***

**Malaria in Pregnancy.** Each year, more than 24 million pregnant women in Africa have a particularly high risk of suffering complications from malaria. Fewer than 5 percent of them, however, have access to preventive malaria therapy. If they contract malaria, they will be three times more likely to have severe and complicated malaria than nonpregnant women. They will also have an increased risk of delivering a low-birthweight baby – malaria contributes to 10 percent of the low-birthweight-related infant deaths in Africa. Malaria may also play a role in mother-to-child HIV transmission, as CDC data suggest that women co-infected with HIV appear to have a two times greater risk of transmitting the virus to the fetus.

To decrease these risks, USAID in **Malawi** has supported policy and service delivery initiatives to promote preventive malaria therapy to pregnant women as part of standard antenatal care. Almost 60 percent of pregnant women in a large pilot district are receiving the therapy, and the project is being scaled up nationwide. USAID will work closely with WHO to apply and implement such successes more broadly across Africa. USAID is also building a "malaria and pregnancy network" of international and U. S. partners to advocate for wider use of intermittent antimalarial therapy during pregnancy.

**Private-Sector Role.** Protecting vulnerable populations from malaria has often been undermined by the lack of simple and effective preventive tools. Field trials in Africa of

insecticide-treated netting (ITN) have demonstrated its ability to reduce mortality by more than 30 percent, which has led to a near universal acceptance of ITN as an essential public health intervention. However, achieving 80 percent coverage of African households by the year 2010 – as called for by the RBM Initiative – requires producing and distributing, annually, 32 million nets and 320 million insecticide treatments for the next 10 years. This requirement far exceeds the capacity of public-sector resources.

Innovations that will increase the capacity and involvement of the private sector in ITN distribution are thus a high priority for USAID. Accordingly, at the end of 1999, USAID launched NetMark, an exciting and innovative approach to marketing ITN services. The heart of NetMark is a partnership among USAID, SC Johnson (a global marketer of consumer products such as RAID! and OFF!), and Group Africa, an African consumer products promoter. In this partnership, SC Johnson procures, packages, and distributes netting and insecticide through local commercial channels. USAID resources promote safe, appropriate use of the netting and insecticides; monitor their health and environmental impact; and create consumer demand for safe, effective, and affordable services. The advantages of this partnership are numerous and mutual – SC Johnson's commercial clout expands NetMark's reach, and USAID's efforts create the market demand that SC Johnson needs to commit itself to providing long-term services. In 2001, NetMark expects to launch products in **Ghana, Mozambique, Nigeria, Senegal, and Zambia**. By the end of the project's fourth year, SC Johnson projects annual sales of 16 million nets and 32 million treatments, with pregnant women and children under 5 the principal "consumers/beneficiaries."

### ***Limiting the Emergence and Spread of Drug-Resistant Malaria in Southeast Asia***

The recent emergence of drug-resistant malaria threatens to reverse the downward trend in the number of malaria deaths in Southeast Asia's Mekong Basin countries. Increased exposure of *Plasmodium falciparum* – the most lethal form of malarial parasite – to sublethal doses of antimalarial drugs has resulted in the parasite's increased resistance not only to first-line drugs such as chloroquine and sulfadoxine pyrimethamine but also to second-line drugs such as mefloquine and quinine. Effective drug-combination therapies have been developed, but they are often significantly more costly than treatment with individual first-line drugs such as chloroquine. People who are at risk for severe disease and death from malaria in the Mekong Basin countries include children, pregnant women, and rural and mobile populations who have limited access to health services.

USAID is working in both Cambodia and Thailand with host country malaria programs, WHO, and other partners to develop, test, and deliver interventions that will limit the emergence and spread of drug resistance. Specific activities include improving the diagnosis of *falciparum* malaria (including the use of dipsticks) so that the newer and more costly drugs are used judiciously; providing effective combination therapies to vulnerable populations; and monitoring drug resistance and malaria drug-use practices.

USAID also supports the collaborative work of the CDC and the WHO regional offices in New Delhi and Manila as a part of the Mekong Roll Back Malaria Initiative. These partners will strengthen local capacity for monitoring drug-resistant malaria in the region and for developing and implementing control measures where appropriate. Under the project, 36 sentinel sites in the six Mekong Basin countries have been established and are now routinely monitoring the emergence and spread of drug-resistant malaria. The quality of antimalarial drugs available on the open market is also routinely monitored. These efforts will allow the countries in the region to begin to address the threat posed by drug-resistant malaria. In 2001, this regional approach will be replicated in the seven Amazon Basin countries of South America, where similar patterns of drug-resistant malaria are found.



## Antimicrobial Resistance

Antimicrobial resistance (AMR) undermines the control of major infectious diseases throughout the world at great costs to individuals, health care systems, and societies. In various countries, bacterial human pathogens such as *Streptococcus pneumoniae*, the most common cause of pneumonia, and *Neisseria gonorrhoeae* have become resistant to first-line antimicrobial agents at an alarmingly rapid pace. HIV is becoming increasingly resistant to first-line antiretroviral drugs. As the number of infected HIV people rises, so does the number of TB cases, and almost a quarter of new TB cases exhibit multidrug resistance in some countries. In almost all malaria-endemic countries, malaria control programs have long been plagued by chloroquine resistance.

Inappropriate and indiscriminate use of antimicrobial drugs is a major factor in the emergence of resistant infectious agents. In developed countries, many drugs are prescribed unnecessarily. Meanwhile, many of the world's people lack access to essential and appropriate drugs, leading to indiscriminate use of inappropriate drugs. The increased mobility of the global community also contributes to the spread of AMR – just as people and commodities cross borders, so do microbes.

### ***Key Achievements in AMR***

The following projects in Nepal and Bangladesh illustrate USAID's AMR activities. In addition, USAID is supporting WHO in developing the first Global Strategy for Containing Antimicrobial Resistance.

**Nepal.** USAID established a network of nine laboratory sites to monitor AMR for dysentery, cholera, bacterial pneumonia, and gonorrhea, and also developed a structure and process for formulating national policies for prescribing antimicrobials based on clinical and laboratory AMR data.

**Bangladesh.** Through hospital and community-based surveillance in urban and rural Bangladesh, the International Centre for Diarrheal Disease Research is improving the ability of physicians to diagnose and treat killer childhood diseases. The surveillance has yielded evidence of increasing resistance to commonly used drugs. To date, the study has found that 57 percent of *Haemophilus influenzae* type b (Hib) isolates (the most common cause of acute meningitis in infancy and early childhood) are resistant to ampicillin, cotrimoxazole, and chloramphenicol. Fortunately, all Hib isolates continue to be susceptible to ceftriaxone. These results will lead to improved guidelines for treating acute respiratory infections in Bangladesh.

### **Surveillance and Response Capacity Building**

Improved responses to infectious diseases depend on the capacity of countries to routinely collect and use health information. USAID's efforts focus on building in-

country capabilities to collect and use high-quality information as the foundation for preventing and controlling infectious diseases. To this end, USAID works closely with host countries, WHO, CDC, and other partners to build country-level capacity for collecting and using information.

### ***Key Achievements in Capacity Building***

- In the **Kyrgyz Republic**, USAID helped establish a model surveillance framework to prevent and control hepatitis. In three sites, the program verified, reported, and tracked hepatitis cases. In addition, USAID helped the infectious disease reference laboratory (the first in Central Asia) to develop quality control standards such as reference panels for diagnosing various types of hepatitis. USAID also helped set the official practice guidelines on hepatitis for all health care workers.
- USAID supported field epidemiology and outbreak investigation training through the Training Programs in Epidemiology for Public Health Interventions Network (TEPHINET). TEPHINET is a private-sector organization that provides this training for developing countries. In September 2000, **Saudi Arabia** reported an outbreak of a disease of unknown origin with a very high case-fatality rate in the southwestern province of Jazan. The disease had reportedly spread into **Yemen** as well. TEPHINET mobilized local graduates of its Field Epidemiology Training Program in **Egypt**, who, with assistance from CDC, investigated the outbreak. Their work revealed that the outbreak was the first known occurrence of Rift Valley Fever outside of Africa. The timely response, promoted by the surveillance capacity introduced by TEPHINET, led to rapid application of improved case management and a subsequent reduction in the case-fatality rate from 75 to 5 percent. Hundreds of lives were saved, and regional surveillance capacity was improved.
- Since 1999, USAID has funded WHO and CDC to support the African regional initiative on integrated disease surveillance (IDS). IDS helps control infectious diseases by establishing effective surveillance systems that improve epidemic detection and enhance the quality of planning and resource allocation. The regional initiative also monitors programs as they are implemented. IDS is a process of national capacity building that proceeds from national assessments to implementation of surveillance programs at the district level. To date, national assessments have been conducted in 12 countries, and nine countries have developed IDS plans of action.

### ***Future Perspectives***

USAID's future efforts will significantly enhance the global response to the threat of infectious diseases. The Agency's strategies for allocating increased FY 2001 resources

for tuberculosis and malaria have been devised to have the greatest impacts on the growing TB epidemic and the increasing problem of malaria, while complementing ongoing investments in the crosscutting issues of antimicrobial resistance and surveillance.

USAID will expand TB programs in a limited number of focus countries selected on the basis of 1) greatest need (indicated by high incidence of TB, high HIV/AIDS prevalence, a risk of escalating epidemics of MDR TB, or a significant contribution to the global burden of TB); 2) political commitment; and 3) technical and managerial feasibility.

To support expanded malaria control, additional funding will be used to mount a strategically focused, high-impact effort that will complement ongoing activities. They will be largely focused in Africa but also include regional activities in South America and Southeast Asia. A limited number of countries will be selected for expanded resources, based on an analysis of national malaria burdens, the political commitment of national governments, infrastructure capacities, and overall potential for success.

## **V. PVO Partnerships**

Private voluntary organizations (PVOs), in partnership with USAID, are having a tremendous impact globally on child survival and health. Traditionally, PVOs have concentrated on directly delivering health services and engaging in humanitarian relief. While these efforts continue, they are now being supplemented by an emphasis on building the institutional capacity of local partners and informing national policy. This new focus ensures the sustainability of strategies and activities at the national, district, and community levels, and is already bringing about improvements in coverage and quality of services.

PVO partners achieve critical, measurable improvements in child survival by:

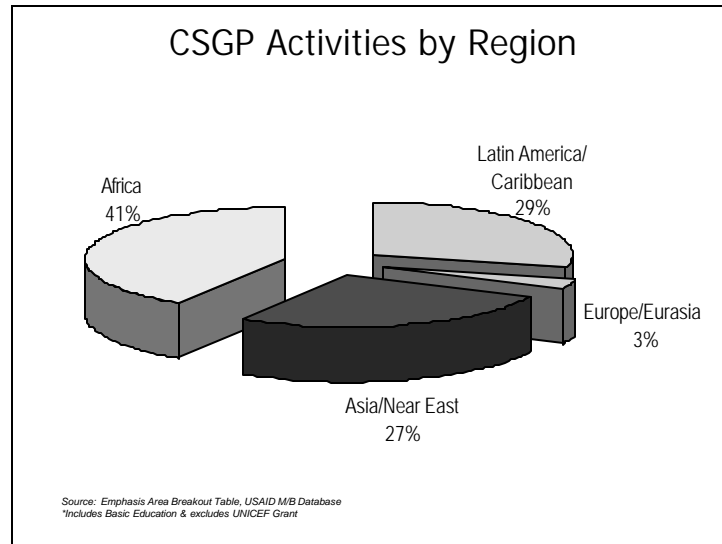
- Implementing effective interventions that are delivered at reasonable cost and therefore increase the potential for local sustainability
- Creating formal partnerships with local governments, NGOs, and other community partners, thus strengthening local capacity at a time when many countries are decentralizing their health services
- Planning for the financial and institutional sustainability of program benefits after the conclusion of project activities
- Demonstrating and using viable, innovative strategies, methods, and materials that are applicable on a wide scale

### ***USAID Approach***

USAID believes that any successful strategy to promote improved child survival and disease control must involve community action, and the PVO community is poised to make that work. The Agency uses three funding mechanisms to work with PVOs to provide critical child survival interventions – mission-funded agreements, USAID/Washington-funded agreements, and the PVO Child Survival Grants Program (CSGP). Activities funded through the first two mechanisms are described in other sections of this report; this section concerns CSGP activities only.

CSGP currently funds 72 projects with 27 PVOs in 35 countries. Figure 17 shows the regional breakdown of these projects. The total life-of-program portfolio is \$64.3 million, with FY 2000 funds providing \$18.4 million in support of 17 new programs. Nine project interventions are included in the program – immunizations; nutrition, including micronutrients and breastfeeding; control of diarrheal disease; acute respiratory infections and pneumonia case management; malaria; integrated management of childhood illness; maternal and newborn care; child spacing; and HIV/AIDS. Many programs implement a subset of these interventions.

Figure 17



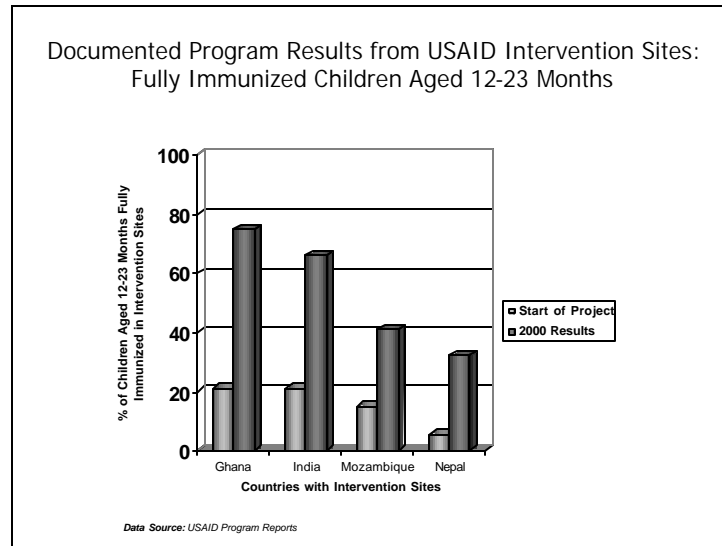
The following sample of innovative project designs and strategies (taken from new funding applications received in FY 2000) is representative of the scope of PVO activities:

- Establishing community development committees
- Creating new local NGOs to continue projects when CSGP grants expire
- Building local coalitions of service providers
- Organizing social health insurance mechanisms for mothers and children
- Establishing village health banks
- Developing fathers clubs to influence maternal and newborn health
- Developing village health emergency and transport plans (including bicycle ambulances)
- Integrating traditional healers into referral systems between communities and health facilities

### ***Key Achievements***

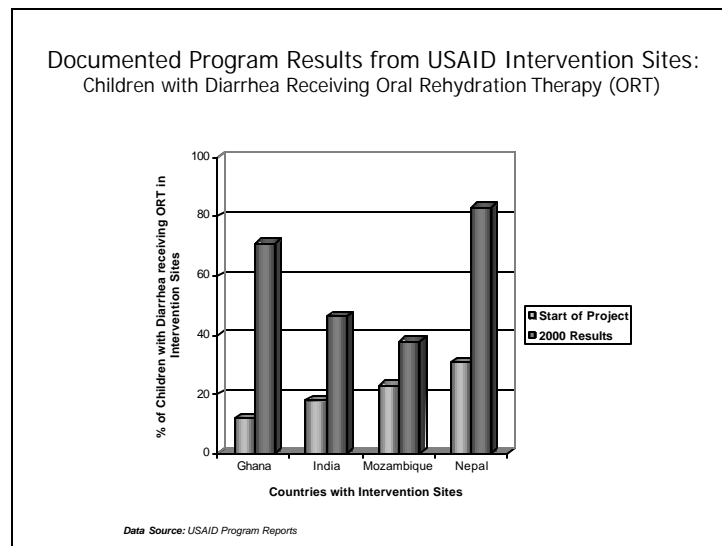
PVOs have historically been very effective at implementing child survival interventions. Figures 18 and 19 show results of selected PVO programs in improving coverage rates for immunization and oral rehydration therapy.

Figure 18



*PVOs have been very effective at implementing child survival interventions. These figures show the results of selected PVO programs in improving coverage rates for immunization and oral rehydration therapy in Ghana, India, Mozambique, and Nepal.*

Figure 19



A recent program review of CSGP activities has documented the range of achievements of PVOs funded by USAID. Some are highlighted here.

- In **Honduras**, World Relief has engaged volunteers to do pneumonia case management. The project's results show no deaths from pneumonia since the volunteers began working. One volunteer successfully treated more than 100 suspected cases over a three-year period.
- Care/**Niger** placed blue bracelets on the wrists of babies to identify which ones were exclusively breastfed. The bracelets proved to be a positive communication tool, as community members would ask why the babies were wearing a blue bracelet, prompting discussions of exclusive breastfeeding.
- In **India**, the Polio Project identified 2000 zero-dose children (children who have never received any vaccinations) in Calcutta. This highlighted the importance of children completely missed by routine immunization and National Immunization Day campaigns. These children have now been targeted for intensified polio immunizations, routine immunizations, and primary health care services.
- In **Guatemala**, Project HOPE has created an alliance between the Ministry of Health, social security facilities, Anacafe health centers, and 14 NGO facilities to develop more effective health service delivery. The midterm evaluation indicated that the project was making good progress – 130 coffee estates have committed to supporting a health unit, strong collaborative relationships have developed among the partner organizations, and departmental committees have assumed much of the program management.
- The PVO community has developed the “Hearth” nutrition model, an innovative and cost-effective approach to rehabilitating malnourished children. The model promotes growth-monitoring activities that identify children with problems and implements corrective measures. PVOs around the world are now replicating this approach.
- PVOs are applying their community-level knowledge and experience to helping countries formulate national policies and implement nationwide programs. In **Kenya**, for example, the government is adapting and implementing the IMCI approach. A national IMCI steering committee has been formed with several PVOs included as members. PVOs are also implementing IMCI in five pilot sites and training trainers within the Ministry of Health.?

### ***Future Perspectives***

PVOs are working in and adapting to a changing environment. Their roles and strengths, and the challenges they face, are evolving as they move from various models of direct

service delivery to strategies that seek to build the capacities of their local partners and enable those partners to become responsible for sustained service delivery. PVOs have traditionally developed strong and effective community ties and programs. Building on this strong base, PVOs are now helping to link communities with the newly created health infrastructures emerging in many developing countries. In this way, PVOs will continue to use their comparative advantage of working at the community level to facilitate measurable improvements in child health and disease control.



## **VI. Basic Education**

At last year's Group of Eight (G-8) summit of industrialized countries in Okinawa, the United States further strengthened its long-standing commitment to basic education, with the goal of achieving universal primary education by 2015. USAID's basic education programs, which focus on universal access and quality instruction for children, are key building blocks to strengthen nascent democracies, develop human and institutional capacity, and bring developing countries into the global economy.

USAID has basic education activities, by region, in the following countries:

***Africa*** – Benin, Ethiopia, Ghana, Guinea, Malawi, Mali, Namibia, Nigeria, South Africa, Uganda, and Zambia

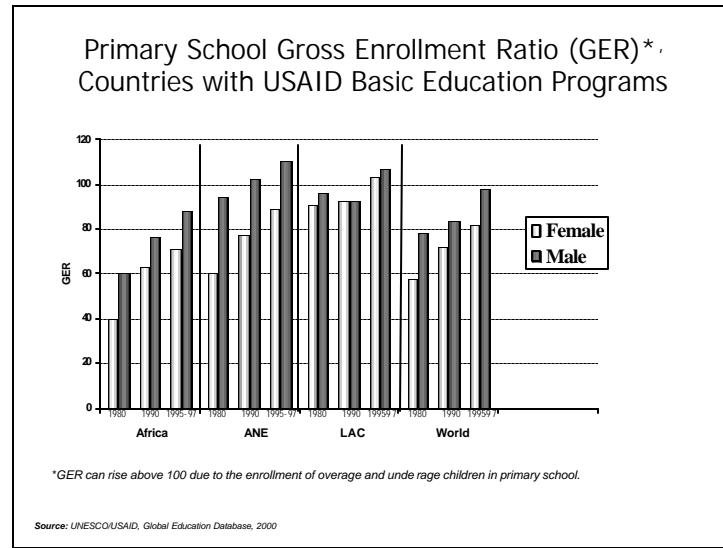
***Asia/Near East*** – Bangladesh, Egypt, India, Morocco, and Nepal

***Latin America/Caribbean*** – Brazil, El Salvador, Guatemala, Haiti, Honduras, Jamaica, Nicaragua, and Peru

### **Advances in Basic Education**

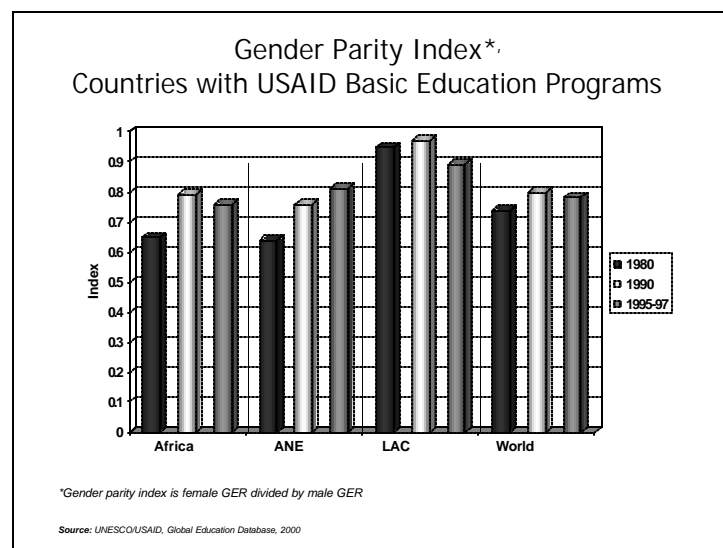
There is much good news. Overall enrollment rates have shown marked increases where USAID has basic education programs (figure 20). Male enrollment has moved from 78 percent in 1980 to 84 percent in 1990 to 98 percent in 1995-97. The female enrollment trend, moving from a lower base, is equally positive, increasing from 58 percent in 1980 to 72 percent in 1990 to 81 percent in 1995-97. The figures for girls are important, as research has shown that investments in girls' education have the highest of all development returns because of positive impacts on individual and family health status, nutrition, family size, and female economic empowerment. USAID programs in girls' education have been major contributors to these increases in female enrollment rates. Gender parity remains an issue, after significant progress in the 1980s. While programs in the Asia/Near East region showed consistent upward progress from 0.76 in 1990 to 0.81 in 1995-97, gender parity rates in Africa and Latin America fell slightly for the same period (figure 21).

Figure 20



*These figures present weighted averages, aggregated by region, of gross enrollment ratios (GERs) and gender parity indices in countries where USAID has basic education programs (see page 85 for regional listings of these countries). The GER is the total number of children of any age enrolled in primary school divided by the population of children of primary school age. Increases over time in GER reflect reductions in the number of children not in school. The gender parity index is the female GER divided by the male GER. Girls continue to have lower access to education compared to boys.*

Figure 21



## **Uneven Progress - Continuing and New Challenges**

Despite increases in the rates of universal primary education and literacy, long-standing problems remain in the way of reaching the 113 million children not in school worldwide. The gap between educational opportunities for girls and boys has closed but is still too high. Other issues include increasing grade repetition, high dropout rates, and differences in rural and urban access to primary education.

Moreover, there are new challenges that are not only making the goal of universal primary education more difficult but are also undermining previous progress. First and foremost is the HIV/AIDS pandemic, which is hollowing out the educational infrastructure, notably in Africa. More than 1,600 teachers died of HIV/AIDS in Zambia last year, and Namibia will have a teacher shortage of about 10,000 at the end of this decade. As parents die from AIDS, children are left without support for school fees. The increase in HIV/AIDS orphans - projected to exceed 40 million globally by 2010 - is a challenge to social support networks and a challenge to education for which there are yet no viable answers.

In addition to HIV/AIDS, natural disasters are a fact of life in developing countries, and the frequency and magnitude of these events have increased. For example, Hurricane Mitch destroyed the Ministry of Education and one-third of all the schools in Honduras. The scope of such damage is beyond the means of developing countries to address.

Finally, there are new issues. Providing quality universal basic education will not be easy in settings of expanding conflicts and civil wars or in the face of abusive labor practices in countries where economics and cultural practices combine to deny educational access, especially to girls. These factors, individually and in varying combinations by country, contribute to the pressures that are beginning to drive enrollment, gender parity, and quality levels backward.

### ***USAID Approach***

USAID directly meets the problems of basic education access and quality, as indicated by high dropout rates, high grade repetition, and gender disparities, through programs targeted at:

- **Policy reform**, to develop national policies and strategies to improve education, with emphasis on access for girls
- **Institutional development**, to strengthen capacity of public- and private-sector institutions to promote primary education, especially for girls
- **Educational practices in classrooms**, to improve the quality of education and community awareness of gender issues
- **Community participation**, to increase involvement of parents in educational decision making

USAID's programs aim to have an impact on three major indicators:

- Access to primary school, often measured by gross or net primary enrollment ratio
- Education access and persistence among girls, often measured by primary school gender parity index
- Education quality and persistence, measured by primary school retention (survival rate to grade five), dropout rates, and pupil-teacher or pupil-book ratios

### ***Key Achievements***

#### *Policy Reform*

- In targeted areas in **Peru**, net enrollment of girls increased from 20 percent in 1996 to 27 percent in 1999. Recognizing and removing obstacles to girls' attendance brings quicker results than most other innovations.
- In **Morocco**, the Morocco Education for Girls pilot project raised the percentage of girls reaching sixth grade in target schools from 16 percent in 1995 to 34 percent in 1999. As a result of the project's success, its educational materials are being mandated nationally, teacher training institutes have adopted new student-centered learning techniques, and Ministry of Education regulations and practices have been changed.

#### *Institutional Development*

- In **Uganda**, USAID persuaded the national government to require every local school and school district to publicly display its budget in order to promote greater openness and accountability and ensure that funds actually reach local schools. This has greatly increased the level of community participation and support in school management.
- In **Benin**, USAID supports an integrated approach to improving educational quality that has produced a 17 percent increase in student achievement. The program includes better classroom materials, improved teaching techniques, and greater community involvement.

#### *Improved Quality*

- In **Uganda**, techniques such as use of senior women teacher advisers and girl-friendly teaching methods are now used in teacher training so that new teachers understand how to create a classroom environment that maximizes learning for all students. The new techniques were derived from baseline research in four regions that looked at male/female and rural/urban disparities.

- In **Nicaragua**, the use of effective teaching methods and increased parental involvement have generated results that are five to 10 percentage points higher than national averages in student performance, attendance, awareness of civic rights and duties, and completion rates.
- In **South Africa**, the USAID-supported Takalani Sesame radio and television shows provide preschool skills to 6 million children who have not received school readiness preparation and thus are at increased risk of dropping out of school.

### Strengthened Community Participation

- In **Morocco**, a national bank designed an “adopt-a-school” program through which branch offices and their business clients engage in partnerships with local schools and offer financial and technical support for initiatives that promote girls’ education. The program has expanded to include other businesses and created over 600 private sector-school partnerships.
- In **Malawi** and **Zambia**, the ministries of health have collaborated with university drama students in producing participatory “sociodramas” to begin to change risky HIV/AIDS behaviors. In Malawi, these dramas have reached more than 15,000 people over a six-month period. Zambia is targeting at-risk populations in its eastern and southern regions.

### *Future Perspectives*

USAID will continue its leadership role in the Education for All (EFA) Initiative's goal of universal primary education by 2015. However, the EFA challenge is now more difficult and more costly (and perhaps unattainable at current resource and capacity levels) as a result of the HIV/AIDS pandemic and its negative impact on teachers and education institutions in Africa and other regions, such as Asia, which are likely to experience similar effects in the coming years.

The issue is further compounded by the increase in conflicts and civil wars around the world and the difficulty of responding to abusive child labor practices in many cultures. The challenges inherent in maintaining and expanding quality primary education programs to reach the 113 million children not in school are more difficult and more expensive to meet as internal problems bump against combinations of forces beyond the control of many developing countries.

Looking ahead at HIV/AIDS issues and the integration of developing countries in the global economy, USAID is already working on building basic life skills, including HIV/AIDS education, into primary school curricula. The linkages between education systems and work force requirements must also be strengthened to create the additional human capital required for economic growth.

In FY 2001, USAID will take part in the U. S. Government's \$300 million Global Food for Education Initiative. This activity, coordinated by the U. S. Department of Agriculture, uses food resources to support and improve basic education programs in 38 countries in support of the Education for All Initiative. Finally, in the area of combating abusive child labor, USAID is exploring how ongoing basic education and related field mission activities can complement and support expanding U. S. Department of Labor programs.

## **VII. Challenges for the Future**

Despite progress in recent years in the health of the world's children, enormous challenges remain. As this report has mentioned, progress in lowering infant and under-five mortality rates has been uneven across regions and among countries within regions.

USAID-supported activities have helped reduce HIV/AIDS prevalence (or slow its increase) in a number of countries, but in many others the spread of HIV/AIDS is overshadowing gains made in other health sectors. The spread of infection and disease and its effect on development underline the need for more efforts in prevention, control, and care. With increased HIV/AIDS funding in 2001, USAID will implement an expanded response to the global pandemic to enhance the capacity of countries to prevent new HIV infections and provide services for those infected with HIV and others affected by it.

At the same time, USAID will help developing countries cope with other infectious diseases, especially in its expanded responses to the growing TB epidemic and increasing problems of malaria and antimicrobial resistance. USAID will expand its TB and malaria activities in carefully selected countries where need is high and the potential for success is good in order to maximize their impact and effectiveness.

The increasing prevalence of HIV/AIDS does not wholly explain the stagnation and declines in health indicators that have occurred in some African countries. Deteriorating health systems are a substantial factor in these setbacks, and the capacity of local institutions to manage programs at the community level need continued strengthening if investments are to generate anticipated returns.

In some parts of the world, interventions of proven effectiveness have received a diminishing emphasis because of newly emerging concerns. While immunization programs made enormous strides in the 1980s and early '90s, immunization rates have since flattened or even decreased in some areas in recent years. As stated in this report, USAID is now taking concerted action to improve immunization and other essential child survival programs worldwide.

Poor maternal health in developing countries continues to negatively affect the health and well-being of mothers and children. To address maternal and neonatal health, USAID will continue to support nutrition programs for pregnant mothers, antenatal care, safe delivery practices, and improved postnatal care for mothers and babies.

Malnutrition is still an underlying factor in more than half of all childhood deaths in developing countries. Accordingly, USAID will continue to promote optimal breastfeeding and include vitamin A supplementation in child survival programs. It will place special emphasis on nutrition for girls and women and advocate for policy changes to advance the cause of improved nutrition at the national, community, and household levels.

To improve the basic education of children, USAID will enhance the quality of student learning and increase equity by reducing gender and other gaps in education. Such programs will have a long-term impact on child survival.

To further accelerate progress in child survival and disease control, USAID will place special emphasis on certain key strategies. These include:

- Forming and working through new strategic international alliances such as GAVI and the Stop TB partnership to address global problems
- Developing and implementing approaches to promote healthy behaviors and practices at the community and household levels
- Promoting integrated approaches to child health such as IMCI and Roll Back Malaria
- Expanding support for and collaboration with PVOs, community-based groups, and faith-based organizations to design and implement innovative and viable approaches to improving health at the local level
- Reinvigorating support for proven, cost-effective child survival and maternal health interventions such as immunization, breastfeeding, and quality antenatal care
- Implementing expanded and comprehensive responses to the HIV/AIDS, tuberculosis, and malaria epidemics
- Building the capacities of health systems and addressing health-sector reforms to maximize the long-term benefits of child survival and disease programs

In the autumn of 2001, a special session of the United Nations General Assembly will assess the progress made toward the goals espoused at the 1990 World Summit for Children. USAID will continue to be a leader in the efforts to complete the Summit's unfinished agenda for children and to protect and improve the health and well-being of people in developing countries in the coming decade.



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## FINANCIAL ANNEX

### Funding Tables

In the FY 2000 funding that USAID received from Congress to support child survival and disease programs, allocations were made in the following categories:

- **Child Survival and Maternal Health.** \$268.2 million supported programs in immunization, nutrition, and maternal health; initiatives to build health care systems and strengthen health care capacity; and other child survival-related activities. Of this total, \$25 million supported the Polio Eradication Initiative; \$12 million supported activities for displaced children and orphans; and \$25 million supported the micronutrients program. Approximately \$50 million of these funds were used to improve maternal health and survival.
- **HIV/AIDS.** \$175 million supported USAID's activities to prevent and control HIV/AIDS and mitigate its impact in developing countries. Over half of these funds supported activities that focus on Africa, where the HIV/AIDS epidemic is most severe. USAID is also a major supporter of the Joint United Nations Programme on HIV/AIDS.
- **Infectious Disease Initiative.** \$73.6 million supported USAID's initiative to reduce the threat of infectious diseases such as malaria and tuberculosis; to reduce the spread of antimicrobial resistance; and to improve disease surveillance and response.
- **Basic Education.** \$98 million supported USAID's basic education for children program. USAID works to reduce educational disparities in targeted countries by focusing on policy reform, institutional development, improving educational practices, and promoting community participation in education.

In addition to funding from the CSD account, over \$100 million from the Economic Support Fund, the Freedom Support Act, and SEED Act funds supported child survival and disease control programs in selected countries, including former states of the Soviet Union and Eastern Europe. A substantial amount of the Agency's Food for Peace resources also benefited children and their mothers.

The FY 2000 allocation also included \$110 million for UNICEF.

Tables and figures providing a detailed analysis of these funds follow.

**Table 1: FY2000 Child Survival and Disease Programs Fund  
Initial Allocations by Bureau and Primary Funding Category  
CSD Funds only (\$000)**

Funding Category	Bureaus							
	Total	AFR	ANE	E&E	LAC	Global	BHR	PPC
<b>Child Survival &amp; Maternal Health</b>	256,171	97,339	50,240		29,664	57,038	21,200	690
<b>Vulnerable Children (DCOF)</b>	12,000	5,100	2,800		900	2,200	1,000	
<b>HIV/AIDS</b>	175,000	94,600	25,550		14,500	38,750	1,150	450
<b>Infectious Disease</b>	73,579	24,831	8,000		15,076	23,372	1,820	480
<b>Sub-Total</b>	<b>516,750</b>	<b>221,870</b>	<b>86,590</b>	<b>0</b>	<b>60,140</b>	<b>121,360</b>	<b>25,170</b>	<b>1,620</b>
<b>Basic Education</b>	98,000	62,130	3,000		19,817	10,874	1,686	493
<b>UNICEF Grant</b>	110,000							
<b>Grand Total</b>	<b>724,750</b>	<b>284,000</b>	<b>89,590</b>	<b>0</b>	<b>79,957</b>	<b>132,234</b>	<b>26,856</b>	<b>2,113</b>

Notes:

\$25 Million of CSD Micronutrient Funds are included in the CS/MH column

\$25 Million of CSD Polio Funds are included in the CS/MH column

Source: USAID Office of Management and Budget

Legend:

AFR	Bureau for Africa
ANE	Bureau for Asia and the Near East
E&E	Bureau for Europe and Eurasia
Global	Bureau for Global Programs and Research
BHR	Bureau for Humanitarian Response
PPC	Bureau for Policy and Program Coordination

**Table 2: FY2000 CSD/Health Estimated Allocations by Major Functional Component and Country, CSD Account only (\$000)**

Bureau/Country	CS/MH	POLIO	DCOF/ VUL	HIV	ID	Total CSD
<b>AFRICA</b>						
ANGOLA	1,935	1,465	500	1,000		4,900
BENIN	2,337	263		1,025	700	4,325
DROC	5,400	1,400	80	1,500	600	8,980
ERITREA	3,158	90		500	385	4,133
ETHIOPIA	3,650	2,300	500	6,700	1,000	14,150
GHANA	4,450	700		4,000	700	9,850
GUINEA	2,810	390		1,725		4,925
KENYA	1,600		520	5,700	550	8,370
LIBERIA	1,052	750	750			2,552
MADAGASCAR	3,050	200		800		4,050
MALAWI	1,350	150	500	5,000	800	7,800
MALI	4,700	400		2,500		7,600
MOZAMBIQUE	5,250	100		5,100	1,000	11,450
NAMIBIA				1,000		1,000
NIGERIA	6,750	1,000		6,750	500	15,000
RWANDA	1,330	370		3,500	300	5,500
SENEGAL	2,550	150		3,700		6,400
SIERRA LEONE			500			500
SOUTH AFRICA	1,750		750	5,700	1,000	9,200
TANZANIA	2,700			6,000	800	9,500
UGANDA	3,150			6,900	600	10,650
ZAMBIA	4,900	100	1,000	7,000	1,500	14,500
ZIMBABWE	200			5,000		5,200
REDSO/EAST	3,800			1,200	500	5,500
REDSO/WEST	2,000			7,400	500	9,900
SAHEL REGIONAL	100			100		200
SUST. DVLPMT. OFF.	17,268	6,072		3,300	5,395	32,035
OTHER	2,200			1,500		3,700
<b>TOTALS</b>	<b>89,440</b>	<b>15,900</b>	<b>5,100</b>	<b>94,600</b>	<b>16,830</b>	<b>221,870</b>

Note: \$8,001,000 of the FY 2000 malaria allocation for the Africa Region, initially budgeted for in Table 1 under the ID Column, was subsequently coded under CS/MH by the Africa Bureau. As a result, the Table 2 Africa ID total is \$8,001,000 lower and the CS/MH total is \$8,001,000 higher than the figures reported in Table 1.

## ASIA/NEAR EAST

BANGLADESH	11,836			2,888		14,724
BURMA	3,000					3,000
CAMBODIA	1,500			2,050		3,550
INDIA	6,500	4,000		8,500	2,500	21,500
INDONESIA	12,950		1,000	4,500	500	18,950
MOROCCO	1,480					1,480
NEPAL	3,000			2,000	2,000	7,000
PHILIPPINES	3,700			1,500	2,000	7,200
SRI LANKA			300			300
THAILAND						0
VIETNAM			1,500			1,500
ANE REGIONAL	2,019			3,500	1,000	6,519
<b>TOTALS</b>	<b>45,985</b>	<b>4,000</b>	<b>2,800</b>	<b>24,938</b>	<b>8,000</b>	<b>85,723</b>

## LATIN AMERICA AND THE CARIBBEAN

BOLIVIA	5,175			800	1,608	7,583
BRAZIL			900	2,000		2,900
DOM. REPUBLIC	600			2,300		2,900
ECUADOR	550					550
EL SALVADOR	4,895			250	2,000	7,145
GUATEMALA	4,775				500	5,275
GUYANA				200		200
HONDURAS	3,000			1,400	500	4,900
JAMAICA	25			1,800		1,825
MEXICO				1,400	3,000	4,400
NICARAGUA	3,900			500	832	5,232
PERU	3,400			500	2,600	6,500
ROCAP				3,150		3,150
LAC Regional	3,680	200		200	3,500	7,580
<b>TOTALS</b>	<b>30,000</b>	<b>200</b>	<b>900</b>	<b>14,500</b>	<b>14,540</b>	<b>60,140</b>

Note: \$536,000 of the FY 2000 malaria allocation for the LAC Region, initially budgeted for in Table 1 under the ID Column, was subsequently coded under CS/MH by the LAC Bureau. As a result, the Table 2 LAC ID total is \$536,000 lower and the CS/MH total is \$536,000 higher than the figures reported in Table 1.

**Grand Totals 165,425 20,100 8,800 134,038 39,370 367,733**

### Legend

CS/MH = Primary causes of child mortality/morbidity and maternal health

POLIO = Polio Eradication Initiative

DCOF/VUL= Displaced Children and Orphans Fund/Vulnerable Children

HIV = HIV/AIDS Prevention and Care

ID = Infectious Disease Initiative



**Table 3: FY2000 CSD-Related Estimated Allocations via Other Accounts by Major Functional Component and Country (\$000)**

Bureau/Country	CS/MH	POLIO	DCOF/ VUL	HIV	ID	Total CSD
<b>ASIA/NEAR EAST</b>						
CAMBODIA	4,000					4,000
EGYPT	37,842			100	1,900	39,842
JORDAN	11,000			300		11,300
WEST BANK	4,868					4,868
Middle East Reg Coop. Proj	1,250					1,250
<b>TOTALS</b>	<b>58,960</b>	<b>0</b>	<b>0</b>	<b>400</b>	<b>1,900</b>	<b>61,260</b>

**EUROPE AND EURASIA**

ALBANIA	1,150					1,150
ARMENIA	4,900					4,900
AZERBAIJAN	2,870					2,870
BELARUS	815					815
BULGARIA	700					700
GEORGIA	1,747			400	1,888	4,035
E&E REGIONAL	3,047			927	205	4,179
KAZAKHSTAN	4,319			231	550	5,100
KYRGYSTAN	2,660			90	250	3,000
MOLDOVA	35					35
ROMANIA	2,726		4,400			7,126
RUSSIA	5,950		1,800	1,650	1900	11,300
TAJIKISTAN	636			25	439	1,100
TURKMENISTAN	1,000				300	1,300
UKRAINE	2,863			500	900	4,263
UZBEKISTAN	3,668			32	900	4,600
<b>TOTALS</b>	<b>39,086</b>	<b>0</b>	<b>6,200</b>	<b>3,855</b>	<b>7,332</b>	<b>56,473</b>

Note: An additional \$226,000 of 1999 Carry Over funds were programmed for the Control of Iodine Deficiency Disorders in Armenia (\$116,000) and Georgia (\$110,000)

**Latin America and the Caribbean**

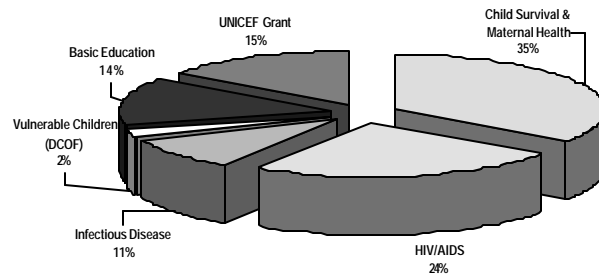
HAITI	8,800			1,349		10,149
<b>TOTALS</b>	<b>8,800</b>	<b>0</b>	<b>0</b>	<b>1,349</b>	<b>0</b>	<b>10,149</b>

**GRAND TOTALS    106,846                    0    6,200    5,604    9,232    127,882**

**Legend**

CS/MH = Primary causes of child mortality/morbidity and maternal health  
POLIO = Polio Eradication Initiative  
DCOF/VUL= Displaced Children and Orphans Fund/Vulnerable Children  
HIV = HIV/AIDS Prevention and Care  
ID = Infectious Disease Initiative

## FY 2000 Child Survival and Disease Program Funds by Primary Funding Category\*

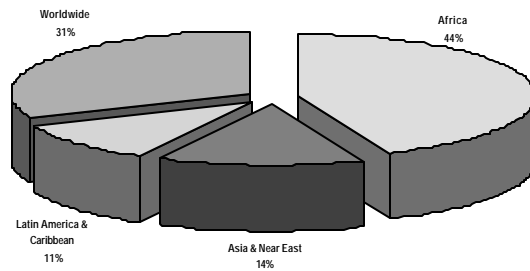


Source: USAID Office of Management and Budget

\*\$25 million of CSD Micronutrient Funds are included in the CS/MH figures  
\$25 million of CSD Polio Funds are included in the CS/MH figures

FY Total Funding = \$724,750,000

## FY 2000 Child Survival and Disease Program Funds by Region

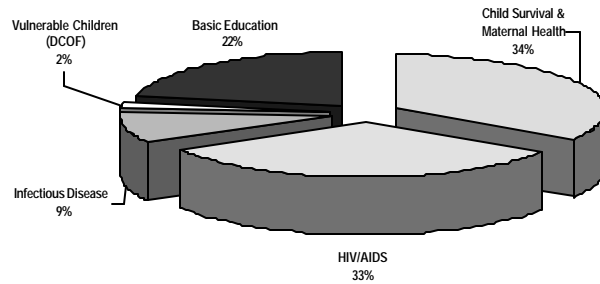


Source: USAID Office of Management and Budget

FY Total Funding = \$724,750,000



## FY 2000 Africa Region Child Survival and Disease Program Funds by Primary Funding Category\*

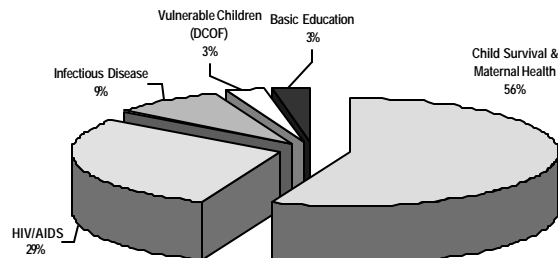


Source: USAID Office of Management and Budget

\*\$25 million of CSD Micronutrient Funds are included in the CS/MH figures  
\$25 million of CSD Polio Funds are included in the CS/MH figures

FY Total Funding = \$284,000,000

## FY 2000 Asia and Near East Region Child Survival and Disease Program Funds by Primary Funding Category\*

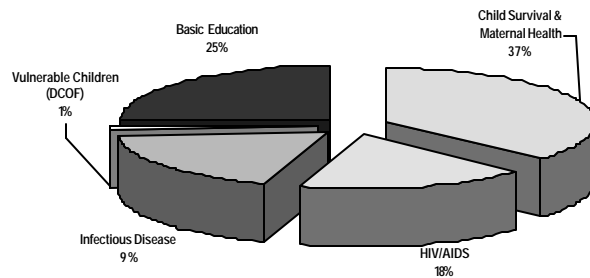


Source: USAID Office of Management and Budget

\*\$25 million of CSD Micronutrient Funds are included in the CS/MH figures  
\$25 million of CSD Polio Funds are included in the CS/MH figures

FY Total Funding = \$89,590,000

## FY 2000 Latin America and the Caribbean Child Survival and Disease Program Funds by Primary Funding Category\*

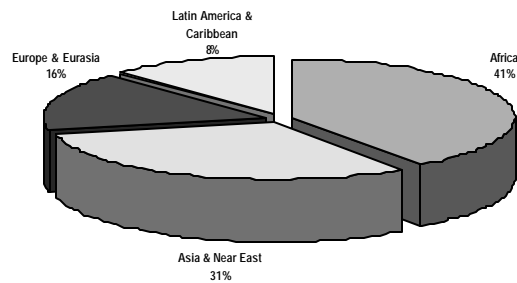


Source: USAID Office of Management and Budget

\*\$25 million of CSD Micronutrient Funds are included in the CS/MH figures  
\$25 million of CSD Polio Funds are included in the CS/MH figures

FY Total Funding = \$79,957,000

## Total Health and Nutrition Funding by Region\*, FY 2000



Source: Emphasis Area Breakout Table, USAID M/B Database

\*Excludes Basic Education and UNICEF Grant

This document was prepared by USAID in conjunction with the Population, Health and Nutrition Information Project.